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GIVEN BY

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JAMAICA.

ANNUAL REPORT

OF THE

INSTITUTE OF JAMAICA,

FOR

THE YEAR ENDED 31ST MARCH, 1896.

Ordered by His Excellency the Governor to be Printed.



JAMAICA:
GOVERNMENT PRINTING OFFICE, 79 DUKE STREET, KINGSTON.
1896.

BOOKS WANTED TO PURCHASE.

- Almanacs, Jamaica.** Any before 1792 and those for the years 1792, 1809, 1810, 1830, 1834-37, 1843, 1846, 1848, 1852-54, 1856, 1858, 1859, 1860-1863, 1865, 1867, 1872, 1874 and 1876.
- Beckford, William.** Remarks upon the situation of Negroes in Jamaica, impartially made from a local experience of nearly thirteen years in that island. By W. Beckford, junr., formerly of Somerly in Suffolk, and late of Hertford in Jamaica, 1788.
- *History of France from the most early Records to the death. of Louis XVI. 1794.*
- Bannantine, James.** Memoirs of Edward Marcus Despard, 1799.
- Biggs, John.** Observations on the Manufacture of Sugar and Rum.
- Bleby, Rev. Henry.** Scenes in the Caribbean Sea.
- Blicke, Charles.** An Essay on the Billious or Yellow Fever of Jamaica, collected from the MS. of a late Surgeon, by Charles Blicke, 1772.
- Blome, Richard.** A Description of the Island of Jamaica. 1st edition; London 1672.
- Broughton, Arthur.** Hortus Eastensis or a Catalogue of Plants in the Garden of Hinton East * * Kingston, 1792.
- *The same. 1794.*
- Browne, Patrick.** Civil and Natural History of Jamaica. Edition of 1769.
- Campbell, John.** Case and Appendix of John Campbell, Appellant, and William Beckford, Respondent, on two appeals relative to a Mortgage on a Plantation called Strathbogie in the Island of Jamaica, folio 1784-1801.
- Dallas, R. C.** Works by. Except the "History of the Maroons" "Miscellaneous Writings" (1791), and "The New Conspiracy."
- Dancer, Dr.** History of the Expedition from Jamaica to Fort Juan on the Lake of Nicaragua. 1780.
- *The Medical Assistant. 1st edition and American edition.*
- *Catalogue of Plants, 1792.*
- *A Roland for an Oliver. . . . St. Jago de la Vega, 1809.*
- Description, A,** of the Windward Passage, and Gulf of Florida, with the Course of the British Trading-Ships to, and from the Island of Jamaica. sm. 4to.; pp 23. (1). London, 1739.
- Edwards, Bryan.** The History Civil and Commercial of the British Colonies in the West Indies. German edition
- *Spanish edition of parts of the above.*
- *An Historical Survey of the French Colony in the Island of St. Domingo; together with an account of the Maroon Negroes in Jamaica, &c., 1797.*
- *Thoughts on the late proceedings of Government respecting the Trade of the West India Islands with the United States, 1784.*
- *Speech at a Free Conference between the Council and Assembly of Jamaica on Mr. Wilberforce's Propositions concerning the Slave Trade, 1790.*
- *Poems. Privately printed about 1794.*
- Election, The,** A Poem. 8vo.; Kingston, Jamaica, 1788.
- Gray, Samuel.** Old Port Royal; or, the Buccaneers' Home. An historical novel. 2 vols. 8vo; Kingston, Jamaica, 1841.
- Hakewill, James.** Coelebs suited.
- Hickeringill, Edmund,** Jamaica Viewed. 1st edition. 1661.
- *3rd edition. 1705.*
- Hill, Richard.** The Picaroons or one hundred and fifty years ago. Being a history of commerce and navigation in the West Indian Seas. (Communicated to the Port Royal Reading Society.) 8vo. Dublin, 1869.
- Howard.** Work on "Rights of Property in Jamaica. [ab. 1828.]
- Jamaica Enslaved and Free.** sm. 8vo. London n. d. Published by the Religious Tract Society. [before 1850.]
- Jamaica, Laws of.** Volume (p 11) of 1st edition containing Laws VI. to VIII. Victoria. Published at St. Jago de la Vega between 1838 and 1846.
- Jamaica Quarterly Journal of Literature, Science and Art.** (Published by James Gall & Co. in and about 1861.)
- Kidd, J. B.** Illustration of Jamaica. Part 1-7. 1840.
- Jelly, Thomas,** A brief Enquiry into the condition of Jamaica. London, 1847.
- Journals of the Synod of the Church of England in Jamaica.** Nos. 1, 3, 4.
- Letter, A, to a Member of Parliament.** Concerning the importance of our Sugar Colonies to great Britain. By a Gentleman who resided many years in the Island of Jamaica. London 1745.
- Letters from Jamaica.** Impressions and Anecdotes. 1873.
- Long, Edward.** Works by. Except his "History of Jamaica."
- Lynch, Mrs. Henry.** Lays of the Sea and other Poems. 2nd edition. London, 1850.
- Marley, or the Life of a Planter in Jamaica,** comprehending characteristic sketches of the present state of society and manners in the British West Indies, and an impartial review of the leading questions relative to Colonial Policy. 2nd edition. Glasgow, 1828. 4to. (or first edition.)
- Merchants, The,** Factors and Agents residing at Kingston, in Jamaica, Complainants, against the inhabitants of Spanish Town, adjacent Parishes, and against the Planters, Settlers, and Chief Body of the people of the Island of Jamaica, Respondents.—The Respondents' case. 4to.; privately printed, London. 1755.
- Mosely, Benjamin, M. D.** A treatise on Tropical Diseases; on Military Operations; and on the Climate of the West Indies. Second edition with considerable additions, London, 1789.
- Mulgrave, Earl of.** Works by; except "Matilda."
- Murray, Henry G.** Tom Kittle's Wake. Kingston, R. Jordon, 1869,
- New and Exact Account of Jamaica.** [By Charles Leslie] 2nd edition, Edinburgh.
- Port Royal, An Account of the Earthquake of 1692 at;** By the Rector.
- Privileges of the Island of Jamaica Vindicated,** with narrative of the Dispute between the Governor and the House of Representatives upon the case of Mr. Oliphant. 8vo.
- Proposal for introducing into Jamaica a quantity of Gold and Silver Species sufficient to carry on the internal Commerce of the Country without the assistance of any Foreign Coin.** By the Hon. F. Cooke, St. Jago de la Vega. 1773.
- Radcliffe, Rev. John.** Lectures on Negro Proverbs, Kingston, 1869.
- Ramsay, William.** Case of William Ramsay, Esq., Inspector-General of Police, a Special Justice over this Colony on charges preferred against him by Hon. Thos. J. Bernard for a supposed Obstruction of the Law in reference to an Alleged Riot at Spanish Town. 8vo; privately printed. 1836.
- Report of the Incorporated Society for the conversion and religious instruction and education of the Negro Slaves in the British West India Islands for the year MDCCCXXVII,** in which is included a general view of the state of religious instructions according to the principles of the United Church of England and Ireland throughout the Dioceses of Jamaica and Barbados and the Leeward Islands. London 1828. 8vo.
- Roby, John.** "Members of the Assembly." (1831).
- Sargeant, George E.** The Jamaica Missionary: a Memoir of William Knibb, London, B. L. Green. (ab. 1849.)
- Scott, Michael.** Tom Cringle's Log. German edition.
- *Cruise of the Midga. German edition.*
- Slave Law of Jamaica,** with proceeding and documents relating thereto. 8vo.; 1828.
- Sheridan's Jamaica Monthly Magazine** (Published in and about 1833.)
- Trapham, Thomas.** A Discourse of the state of Health of Jamaica, with a provision therefore calculated from the air, the place and the water; the customs and manners of living, &c. London. 1679. 8vo.
- Walker, Ralph** (of Jamaica). A Treatise on Magnetism, with a Description and Explanation of a Meridional Azimuth Compass, &c.
- West India Field.** Nos. 17 and 48.
- Wiles, James.** Hortus Eastensis. 1826.

Address :—

The Secretary,
Institute of Jamaica.

ANNUAL REPORT

ON THE

INSTITUTE OF JAMAICA,

FOR THE YEAR ENDED 31st MARCH, 1896.

★ 4310.164

1896-99, 701.

Institute of Jamaica, Kingston, May 18th, 1896.

The Report is arranged under the following heads:—

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R E P O R T.

I.—ORGANIZATION.

(i) *Board of Governors*.—During the year, the Board lost, as a member, the Honourable Dr Crane, C.M.G., Superintending Medical Officer, who resigned his seat on leaving the Island. The late Chief Justice, Sir Henry James Burford-Hancock, was appointed to fill the vacancy, but died on the 23rd of October, 1895; never having occupied his seat at the Board. In his place, the Board had much pleasure in welcoming back the Honourable Dr. C. B. Mosse, C.B., one of the original members of the Board, who, on his resumption of his duties as Senior Medical Officer of the Island, was appointed to the Board by the Governor. At its meeting on the 6th March, 1896, the Board passed a resolution, expressing its gratification at Dr. Mosse's re-appointment as a member, and extending to him a cordial welcome on his resumption of his seat. It was also unanimously resolved to place Dr. Mosse's name on the list of Governors in its original position.

(ii) *Committees*.—The following Committees of members of the Board have been appointed and have met as occasion required during the year: Library, Publishing and Lecture; Museum and Imperial Institute; and New Museum Fittings.

BOARD.				COMMITTEES.					
	Attendance at Ordinary Meetings.	Attendance at Special Meetings.	Total Attendance at Board Meetings.	Library Committee.	Museum Committee.	New Museum Fittings Committee.	Total Attendance at Committee Meetings.	Members Meetings.	Grand Total at Board, Committee and Members' Meetings.
Meetings held ..	12	...	12	6	12	2	20	6	38
Rev. Wm. Simms, M.A., Chairman, 1895-96	12	...	12	6	0	0	6	4	22
Hon. Dr. Mosse, C.B. (1)	0	...	0	0	0	0	0	0	0
Hon. Wm. Fawcett, B.Sc.	11	...	11	1	2	0	3	1	15
J. W. Plaxton, Esq., M.R.C.S. (3)	6	...	6	0	10	2	12	0	18
H. Vendryes, Esq.	6	...	6	0	5	1	6	1	13
Rev. Wm. Gillies	9	...	9	6	0	2	8	6	23
G. C. Henderson, Esq., M.D. (3)	5	...	5	0	6	1	7	0	12
W. H. Strachan, Esq., F.L.S., L.R.C.P.	10	...	10	0	8	0	8	0	18
Hon. S. C. Burke, F.R.G.S.	3	...	3	0	0	0	0	0	3
J. Allwood, Esq.	7	...	7	3	1	0	4	0	11
Hon. S. L. Crane, C.M.G. (4)	0	...	0	0	0	0	0	0	0
Jasper Cargill, Esq., M.D.	5	...	5	0	3	0	3	0	8
Sir H. J. Burford-Hancock (5)	0	...	0	0	0	0	0	0	0

(1.) Appointed 27th February, 1896.

(2.) Absent from the Island from September 28th, 1894, to July 28th, 1895.

(3.) " " " " " February 22nd, 1896.

(4.) Resigned his seat 20th August, 1895.

(5.) Appointed 19th August, 1895. Died 23rd October, 1895.

(iii.) *Executive Staff*.—Mr. Cundall, the Secretary and Librarian of the Institute, left the Island on leave of absence on April 30th, 1895, and returned on January 30th, 1896. During his absence, Mr. Duerden, the Curator, acted as Secretary, while the Chairman of the Library Committee, the Rev. Wm. Gillies, kindly supervised the affairs of the Library.

While in England the following objects engaged the attention of the Secretary—(i.) the supply of books for the Library, and their binding; (ii.) the extension of the Library movement to country districts; (iii.) the management of Libraries; (iv.) the bibliography of the island; (v.) the Banana meal industry; (vi.) the Institute's Court at the Imperial Institute; (vii.) Information for intending settlers; (viii.) the formation of a Jamaica Branch of the National Home Reading Union; (ix.) the Arawak Remains from Halberstadt, &c.; (ix.) the Journal of the Institute; and (x.) the acquisition of objects for the Art Gallery.

(iv.) *Membership*.—During the year, 57 Members joined the Institute; 3 were elected Corresponding Members; and 54 joined as subscribing Members, making, with 9 Honorary, 11 Corresponding, 4 Life, and 311 Subscribing Members, a total of 392. Deducting 59 resignations and 1 death, the roll now stands at 332, made up as follows:—Honorary 9, Corresponding 14, Life 4, and Subscribing 305.

(v.) *Building Accommodation*.—The new museum was opened to the public on Wednesday, the 27th November, 1895, by His Excellency the Governor. In it has been placed, in addition to the ordinary museum specimens, a special Loan Exhibition of examples illustrative of Jamaica Anthropology.

The Library has been re-distributed over the rooms of Date Tree Hall; the Reading Room being transferred from the central room upstairs to the central room downstairs. The North Room downstairs has been set aside for the use of members of the Institute, and the South Room upstairs for books on Jamaica and on the West Indies. The old Reading Room has been reserved as a Lecture Hall; and there will no longer be any occasion to interfere with the comfort of Readers when meetings are held or Lectures are delivered.

(vi) *Hours of Opening*.—The Library and Art Gallery have, as usual, been kept open from 11 a.m. to 9 p.m.; but the hours of opening of the Museum have been changed to: from 10 a.m. till dusk. As will be seen from the tables given in Appendices B and I, the increase in the number of visitors, both as regards the Library and the Museum, has been satisfactory.

(vii) *Finance*. In Appendix A is given a statement of the Receipts and Disbursements of the Institute during the twelve months.

II. LITERATURE.

(viii) *Library. Visitors*.—Appendix B. gives the number of visitors to the Reading Room of the Library during the year, (35,399) which, when compared with that of last year (29,801) shows an increase of 18 per cent.

The highest number of visitors on any one day was on Saturday, the 28th September, 1895, when 163 persons made use of the Reading Room.

May, June and October are the months which show the highest number of visitors. For the two previous years, the months with the largest attendances were March, January and February. This year, however, the Library had to be closed in March for three afternoons, while Lectures were being given, and for six whole days, for the purposes of removal.

Works issued.—Appendix C. gives the number of works lent out during the year, which, when compared with last year (6,175), shows a slight decrease, *i.e.* 25. There is an increase in the number of periodicals borrowed; but a marked decrease in the novels. The percentage of novels of the total works borrowed (35.66) is the lowest on record, and is far lower than in public libraries in England. This decrease in the number of novels borrowed is due apparently rather to the fact that but few additions have been made to fiction during the year than to any increased love of more serious reading on the part of members of the Institute.

Additions to the Library.—As will be seen from Appendix D., 667 works have been added during the year, 431 by donation, and 236 by purchase. The Board would here record its thanks to those who have kindly made donations to the Library, and whose names are recorded in the Appendix.

A desire is frequently expressed by readers in the library and by members of the Institute for the addition to the library of the latest—not unfrequently the most sensational—publications in fiction.

The Board does not feel that it would be doing right in spending public funds in the purchase of ephemeral novels. Good standard novels it desires to add to the library, and adds so far as funds permit. But it feels that its first duty is to see that the library contains all the books obtainable on Jamaica; the best of the publications on other West India Islands, and on the West Indies generally; good works of reference; and as many as possible of the current contributions to the higher branches of literature; whilst the part of the members' subscriptions available for the purchase of books, which in the aggregate is not very great, is all that it feels justified in spending on even the better class of ephemeral books.

(ix.) *Literature in Country Districts*.—Negotiations have been carried on during the year, but up to the close of the financial year nothing definite has been settled with regard to the supply of literature in the country districts. A selection of works suitable to a small reference and lending library, has however been ordered from England, and will be ready for use so soon as plans are matured.

(x.) *National Home Reading Union*.—The Board in its desire to spread as far as possible the influence of literature throughout the island, has formed itself into a Committee for the management of a Jamaica Branch of the National Home Reading Union. The matter will not, however, take definite shape until the new course commences in October, 1896.

III.—SCIENCE.

(xi.) *Museum*.—The two most important events of the year in the Science branch of the Institute, have been the removal of the Museum collections from the lower floor of Date Tree Hall to the adjoining new premises; and the holding, in connection with the opening of the New Museum, of an Anthropological Exhibition, specially illustrative of the life and customs of the aboriginal inhabitants of Jamaica.

New Premises.—The new building is much better adapted, so far as lighting and accommodation are concerned, for the display of objects, and for carrying on the various other duties connected with museum work.

On the ground floor are now located the whole of the collections of the Government Geological Survey, the large series of Jamaica woods, and most of the natural history collections, including the birds, and some of the fishes and invertebrates. On the upper floor are gathered together, for the present, the Anthropological collections, the Imperial Institute collections, and the rock and mineral specimens.

Cases.—The cases have been renovated, and the experiment has been made with marked success of substituting glass shelves for the thick wooden ones in some of the vertical show cases. All the cases are well filled with specimens, so that there is no opportunity of displaying more objects until new cases are added.

A special case has been arranged showing in an ascending order the principal types of the animal kingdom, from Protozoa to Man, with suitable descriptive labels. The series will be very useful for students and others wishing to appreciate, as a whole, the main groups in zoological classification. Another case is devoted to the special characters of Snakes, and includes the various species and varieties of the Jamaica representatives of the order.

Display of Specimens.—The plan, now in use in most museums, has been adopted of fixing the alcohol specimens to vertical plates of glass. This enables the various parts of an object to be more effectively displayed. Progress has been made towards having the objects in the collection properly labelled; and with a description, drawing attention to their principal features.

Contributions of Specimens.—For some time the practice has been followed of publishing in the local newspapers, the additions to the Museum for each month. The complete list of contributors for the year is given in Appendix G. In addition to those of anthropological interest, special mention should be made of Mr. Jarvis's gift of a collection of named Jamaica crabs. These, added to others previously possessed by the museum, now embrace a very large proportion of the numerous representatives of the group.

(xiii.) *Biological Laboratory*.—A Biological Laboratory, fitted with appliances for the carrying on of original scientific work has been organized, and the necessary adjuncts and instruments have been obtained. A study of the Jamaica Actinaria is now being carried on in the Laboratory.

(xiv.) *Live Exhibits*.—An attempt has been made to add to the usefulness and attractiveness of the Museum by maintaining specimens of live animals. It is noted that they are always viewed with great interest. During the year various arthropods, lizards, snakes, tortoises, turtles, birds, and agoutis have been kept. There are now, one crocodile, two agoutis, and four tortoises on the space outside the building.

(xv.) *Anthropological Exhibition*.—The discovery of aboriginal remains in a cave at Halberstadt, by the Rev. W. W. Rumsey on the 10th of April, gave an undoubted stimulus to research into the early history of the Island; and a generous response was made by various ladies and gentlemen to the request made by the Board for the loan and gift of objects for the Anthropological Exhibition. The full list of these is given in Appendix G. Special mention must, however, be made of the contributions received from Lady Blake, Miss Moulton-Barrett, the Rev. W. W. Rumsey, Mr. B. S. Gosset, Inspector Church, Dr. G. J. Neish, Mr. W. H. Plant, the Rev. T. W. Bindley, and the Hon. D. Campbell; and also of the loan of recent Indian objects from the Demerara Museum, made through the Curator, Mr. J. J. Quelch.

Anthropological Research.—As a result of the exhibition, the Board's desire that a stimulus might be given to Jamaica anthropology has been realised.

Investigations have shown that instead of the island being deficient in remains of its aboriginal inhabitants, as has hitherto been supposed, these are not unfrequently to be met with. Explorations have been carried on during the year by Lady Blake, the Rev. W. W. Rumsey, Inspector Church, Mr. J. F. Brennan and the Curator, while some are still in progress. A full account of these results is being prepared and will be published in the Journal of the Institute, but the following summary of what has been already accomplished during the year may be given.

Shell-mounds or Refuse-heaps.—Shell-mounds have been discovered and investigated at the following places:—In St. Ann, at Retreat; in Trelawny, at Wales and Stewart Castle; in St. James, at Mammee Hill and Spotty Hill; on California Estate, at Sheep Pen Pasture; in St. Andrew, at Hope.

The accumulations in all are extremely similar in character: they consist of numerous species of marine and land shells, many of them perforated for the extraction of the animal; bones and spines of various fish, and of the Indian coney; crabs' claws; pottery, aboriginal in character; and occasional broken implements, ashes and charcoal.

Caves.—The following caves containing aboriginal remains, mostly bones and pottery, have been brought to light. Halberstadt Cave, Cambridge Hill Cave, Butney Bay Cave, Old Harbour Cave and the California Cave.

Rock Carvings are now known in the St. John's District; Pantrepant in Trelawny, and Dry Land settlement in the Pear Tree Grove District.

A great number of aboriginal implements have been brought to public notice, including flint and shell implements, and others of exceptional type. Three or four examples of images have been placed on exhibition.

(xvi.) *Economic Entomology*.—Specimens of larvæ and insect pests are continually received, all having an important bearing upon the agriculture of the island. The identification of these is in most cases given, and various remedies and suggestions are made.

Special investigations have been carried out by the Curator; one, on behalf of the Institute, on the Pimento borer in St. Ann; and another, in company with Mr. Cradwick, for the Jamaica Agricultural Society on the condition of the Orange Trees in St. Ann. Reports on the result of the investigations have been drawn up and presented.

(xvii.) *Notes from the Museum*.—An endeavour has been made during the year, by means of notes in the various local papers, to stimulate an interest in the Island in the work of the Museum, and diffuse more widely matters of local and scientific interest. In Appendix H. is the list of those notes which have appeared.

(xviii.) *Collecting Expeditions*.—In addition to investigating many of the Anthropological remains, the Curator has made various collecting expeditions, mainly restricted to the harbour, for the purpose of obtaining specimens for the museum, and for studying the Jamaica Marine Fauna.

(xix.) *Demonstrations*.—With a view to increase the amount of instruction afforded by the objects in the museum, three public demonstrations have been given by the Curator upon special topics, illustrated by the collections. The first was given upon the objects in the case illustrating the classification of the Animal Kingdom, and was attended by about seventy visitors: a second, upon the Anthropological collections, was, owing to insufficient notice being given, not well attended; a third, upon the same collections, was devoted specially to the Students of the Training Colleges, of whom about eighty attended.

(xx.) *Assistance of Specialists*.—Specialists in various branches of science have rendered valuable assistance during the year. Sir William Flower contributed to the meeting of the British Association at Ipswich a preliminary note, which was reprinted in "Nature," upon the human crania and other bones from the Halberstadt cave. Miss M. J. Rathbun, Smithsonian Institution, has named all the Museum specimens of crabs. Mr. G. H. Carpenter, B.Sc., Science and Art Museum, Dublin, a large collection of Arachnoidea. Mr. L. O. Howard, U. S. Department of Agriculture, has examined some of the insects. Professor T. D. A. Cockerell, New Mexico, various scale insects. Professor Grenville A. J. Cole, Royal College of Science, Dublin, is now engaged upon a series of Jamaica rocks, and Dr. Scharff, Dublin, upon a collection of slugs. Professor McMurrich and Professor A. C. Haddon have assisted with the Actinaria. A fungus was identified by the authorities of Kew Gardens.

IV.—ART.

(xxi.) *Art Classes*.—As Miss Vaughan-Pryce, the instructress in the Art Classes, left the island in the latter part of 1895, the classes had perforce to be suspended. So soon as a suitable instructor can be found the classes will be re-commenced.

(xxii.) *Art Exhibition*.—A small Loan Exhibition of Water Colour Drawings, by Lady Blake, Mrs Marescaux and Mrs. Cundall, was held in the Art Gallery during April.

(xxiii.) *Art Gallery*.—In Appendix J is a list of the portraits which have been added to the Portrait Gallery, and other additions to the Art Gallery. The Secretary while in England purchased a series of engravings illustrative of the history of painting in England. These pictures when framed will be hung round the walls of the Lecture Hall.

V. LITERATURE, SCIENCE AND ART.

(xxiv.) *Members' Meetings*.—During the year six Members' Meetings were held. The following papers were read:—

(30). "The growth of Modern Sociology and its present political applications," by the Hon. Thomas Capper, B.A. (31). "Jamaica in the Victorian Era," by the Rev. William Simms, M.A., forming the two last of a series on "The Literary, Scientific, Social and other Developments of the Victorian Era." (32). "The Marine Zoology of Kingston Harbour," by J. E. Duerdon, A.R.C.Sc. (Lond.), Curator of the Museum. (33). "The Structure of Trees," by the Hon. W. Fawcett, B. Sc. (34). "Hybridization and Variability," by Dr. M. Grabham, M.B., and (35). "Capillarity," by J. E. Briggs, M.A.

(xxv.) *Institute of Jamaica Lectures*.—The eighth course of Institute of Jamaica Lectures, given by the Curator, Mr. Duerden, on "The Principles of Biology," was commenced on Thursday, 27th February, 1896. The first four Lectures of the course were given in the old Museum, and the fifth in the new Lecture Hall.

(xxvi.) *Journal of the Institute*.—The second part of the second volume of the Journal of the Institute was published in May 1895, and contained amongst others the following articles:—Jamaica Worthies—"John Roby, Author and Philanthropist," by Miss Roby, (illustrated); "Rev. George Wilson Bridges" by the Editor; "Hon. J. C. Phillippo," by Rev. J. D. East, (illustrated) "Rev. J. Radcliffe," by Rev. W. Gillies (illustrated); "Some further notes on William Beckford, Historian," by the Editor; "Rodney's Victory over DeGrasse," by the late Commander Nankivell, R. N. (illustrated); A visit to Turks Island" by the Hon. Thomas Capper, B. A. (illustrated) "Science Notes from the Museum" by the Curator, J. E. Duerden; "Special Sundry Notes on the Jamaica Fauna," by Professor C. H. Tyler Townsend, F.E.S.; On a method of modelling certain Invertebrata for Museum Exhibition," by R. W. Shufeldt, M.D.; "On a Butterfly considered to be *Anæa Echenus*," by T. D. A. Cockerell, F.Z.S.; "The Grassquit bot," by Professor C. H. Tyler Townsend, F.E.S.; "A small acalyphate Muscid;" "On a Fish of the Genus *Sicydium*," both by Professor C. H. Tyler Townsend; "A search for fresh water at Port Royal;" and "The Painting of Rodney in the Town Hall, Kingston."

(xxvii.) *Other Publications*.—Copies of Publications of the Institute, particularly the Brief Handbook of Information, have been sent from time to time, to various institutions and persons who have asked for information about the island.

The Jamaica section of the "Handbook of General Information for intending settlers in the West Indies," published by the Emigrants' Information Office, London, was duly corrected up to date by the Board for that office.

(xxviii.) *Imperial Institute*.—The Board has received from the Imperial Institute authorities a report of the specimens of Jamaica timbers which were forwarded for the purpose of being tested. This report is given in Appendix L.

(xxix.) *Congress of Chambers of Commerce of the Empire*.—The Board nominated Mr C Washington Eves, C.M.G., as its representative at the Third Congress of Chambers of Commerce of the Empire, to be held in London in June, 1896.

The removal of the museum collections to the New Museum has proved a great boon to all sections of the Institute; the Library has gained increased accommodation, enabling rooms to be set aside for Jamaica and West India Books, and for Members of the Institute; the Museum has acquired a new and more suitable home, while space has been secured in the upper floor of Date Tree Hall for the further development of the Art side of the Institute: arrangements have been made for the extension of the advantages of Literature to the country districts; and in the hands of the Curator, much progress has been made in the scientific work of the Institute, an interest having been awakened and fostered in Jamaica Anthropology, and the Museum having been arranged to better advantage than hitherto.

The Board, therefore, feels justified in thinking that the year just closed may be characterised as one of distinct advance; and is glad to be able to report that the Government and Legislature agree with it that the time originally anticipated has now arrived when increased usefulness deserves increased support.

WM. SIMMS, Chairman of the Board, 1895-96.

FRANK CUNDALL, Secretary of the Institute of Jamaica.

APPENDIX A.

Institute of Jamaica.

(i) —VOTE—Amount of the sum expended compared with the sum estimated for the Institute of Jamaica in the period from 1st April, 1895, to 31st March, 1896, showing the Saving or Deficit upon each Sub-Head of the Estimates

	Sub-Head.	Estimate.	Expenditure.	Expenditure compared with Estimate.	
				Less than Estimated.	More than Estimated.
		£ s. d.	£ s. d.	£ s. d.	£ s. d.
A.	Salaries	1,310 8 0	1,262 4 8	48 3 4	
B.	Services	618 12 0	686 17 8	...	68 5 8
C.	Pensions	21 0 0	21 0 0	...	
D.	Imperial Institute	555 17 10	526 8 8	29 9 2	
E.	New Premises	119 9 6	119 9 6	...	
				77 12 6	68 5 8
	Deduct Deficit	...	...	68 5 8	
	Saving	...	...	9 6 10	

INSTITUTE OF JAMAICA.

Dr.	(ii.) Loan from Government.						Cr.		
1895.		£	s.	d.	1895.	£	s.	d.	
1st April—To Loan	...	500	0	0	By Contractor	...	495	12	6
					“ Director of Public Works	...	2	14	2
					“ Gas and Water	...	1	13	4
		<hr/>					<hr/>		
		£500	0	0			£500	0	0

INSTITUTE OF JAMAICA.

(iii.) PRIVATE FUNDS.—Accounts of Receipts and Disbursements for the year ended March 31st, 1896.

To Balance	£ s. d.	By New Premises	£ s. d.
“ Deposit from Bank	243 18 8	“ Premium on Secretary's Salary	227 4 7
“ Handbook of Information (grant)	158 5 7	“ to England	4 0 0
“ Subscriptions 1895	37 4 8	“ General Expenditure	197 14 4
“ “ 1896	29 5 0		
“ Sale of Publications	48 10 0		
“ Subscriptions; Art Classes	11 4 1		
“ Petty Receipts	0 18 0	“ Balance	428 18 11
	3 8 3		103 15 4
	£532 14 3		£532 14 3

APPENDIX B

Record of Readers in the Library for the year ending 31st March, 1896, as compared with the four previous years.

Month.	1895-96.			1894-95.			1893-94.			1892-93.			1891-92.		
	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.
April	1,748	1,266	3,014	1,081	998	2,079	922	606	1,528	789	541	1,330	853	181	1,039
May	2,019	1,443	3,462	1,112	982	2,094	963	770	1,733	669	528	1,197	577	216	793
June	1,728	1,453	3,181	1,146	973	2,119	930	752	1,682	664	595	1,259	622	273	895
July	1,654	1,447	3,101	1,336	974	2,310	1,029	732	1,761	754	545	1,299	649	245	894
August	1,473	1,422	2,895	1,330	1,065	2,395	1,178	827	2,005	623	425	1,048	655	234	889
September	1,732	1,298	3,030	1,273	937	2,210	1,143	830	1,973	711	677	1,388	567	248	815
October	1,848	1,264	3,112	1,266	1,143	2,409	1,106	837	1,943	846	579	1,425	622	274	896
November	1,790	1,139	2,929	1,508	1,155	2,663	1,164	829	1,993	763	642	1,405	581	214	795
December	1,502	1,054	2,556	1,252	931	2,183	1,022	833	1,855	690	448	1,138	555	351	906
January	1,600	1,122	2,722	1,701	1,311	3,012	1,275	1,002	2,277	889	613	1,502	750	521	1,271
February	1,713	1,210	2,923	1,791	1,132	2,923	1,064	947	2,011	830	630	1,460	766	564	1,390
March	1,498	926	*1,424	2,065	1,339	3,404	1,252	1,088	2,340	925	654	1,579	685	517	1,202
	20,355	15,044	35,399	16,861	12,940	29,801	13,048	10,053	23,101	9,153	6,877	16,030	7,887	3,838	11,725

* Closed for three afternoons and six whole days.

Totals		COMPARISON.	
1895-96	...	1895-96	35,399
1894-95	...	1894-95	29,801
1893-94	...		23,101
1892-93	...		16,030
1891-92	...		11,725
		Increase	5,598 or 18 per cent.

APPENDIX C.

Classified Return of the number of Works issued from the Library during the year ended 31st March, 1896, compared with the Return for the four previous years.

Number of Borrowers.			1895-96.		1894-95.		1893-94.		1892-93.		1891-92.	
			272.		288.		237.		229		173.	
			Books Borrowed.	Percentage	Books Borrowed.	Percentage	Books Borrowed.	Percentage	Books Borrowed.	Percentage	Books Borrowed.	Percentage
Theology, Philosophy, &c.	...	78	1.27	84	1.36	110	1.84	90	1.95	64	1.96	
History, Biography, Travels, &c.	...	398	6.47	545	8.83	529	8.86	540	11.70	463	14.15	
Law, Politics, Sociology, &c.	...	52	0.85	43	0.70	35	0.58	29	0.63	36	1.10	
Art, Science, Natural History	...	276	4.49	269	4.36	340	5.69	186	4.03	219	6.69	
Poetry and Drama	...	66	1.07	59	0.95	79	1.32	142	3.08	63	1.93	
Prose Fiction	...	2,193	35.66	2,476	40.10	2,897	48.52	2,021	43.78	1,617	49.42	
Miscellaneous	...	87	1.41	131	2.12	89	1.49	137	2.97	169	5.16	
Periodicals	...	2,916	47.41	2,435	39.43	1,798	30.11	1,387	30.05	538	16.44	
West India	...	84	1.37	133	2.15	94	1.59	84	1.81	103	3.15	
Total	...	6,150	100.00	6,175	100.00	5,971	100.00	4,616	100.00	3,272	100.00	
Comparison			...	1894-95		...	6,175					
				1895-96		...	6,150					
							Decrease	25				

APPENDIX D.

WORKS ADDED TO THE LIBRARY 1895-96.

Bound Volumes Presented.

	Vols.		Vols.
Smithsonian Institution ...	4	Royal Colonial Institute ...	1
Canadian Government ...	2	E. B. Lynch ...	2
Rev. S. J. Washington ...	1	J. W. Powell ...	7
Colonial Secretary ...	17	Mrs. T. Oughton ...	1
Corporation of the City of London ...	1	Heirs of late Hinton East through	
J. J. Thomas ...	1	O. Marescaux ...	1
F. A. Petgrave ...	1		
British Museum ...	2	Total ...	42
A. C. Hamlin ...	1		

Pamphlets, Maps, &c., presented.

Smithsonian Institution ...	11	Society of Naturalists, Moscow ...	4
American Philosophical Society ...	3	Imperial Institute ...	1
U. S. Department of Agriculture ...	11	Hon. W. Fawcett ...	1
Geological Institution, Upsala ...	1	Institute of Civil Engineers ...	1
Public Library, Boston ...	1	Missouri Botanic Garden ...	1
R. Bigelow ...	1	New South Wales Government ...	1
Colonial Secretary ...	315	J. Gall ...	3
American Museum of Natural History ...	1	W. E. Broadway ...	1
Scientific Society of Chili ...	1	Registrar General ...	2
Royal Society of New South Wales ...	1	E. F. Pittman ...	1
New Zealand Institute ...	1	Royal Colonial Institute ...	13
D. B. Callaghan ...	2	Rev. C. S. Smyth ...	1
Natural History Museum, Paris ...	1	F. Cundall ...	2
Board of Education, Jamaica ...	1	R. G. Haliburton ...	1
Academy of Sciences, Amsterdam ...	5		
			389

Summary

Bound Volumes presented	...	42
Pamphlets, &c. "	...	389
Volumes purchased	...	231
Pamphlets "	...	5
Total	...	667

APPENDIX E.

Periodicals and Newspapers on the Tables of the Reading Room.

Agricultural Gazette, New South Wales	Jamaica Gazette
Agricultural Journal, Cape Colony	Jamaica Post
Annals and Magazine of Natural History	Jamaica Weather Report
Army List	Johns Hopkins University Circulars
Art Amateur	Journal of the Board of Agriculture
Art Journal	Journal of the Institute of Jamaica
Athenæum	Journal of the Microscopical Society
Blackwood's Magazine	Journal of the Trinidad Field Naturalist Club
Book News	Kew Bulletin
British Trade Journal	Leisure Hour
Budget (Jamaica)	Literary World
Builder	Macmillan's Magazine
Bulletin of the Botanical Department (Jamaica)	Magazine of Art
Bulletin of the Torrey Botanical Club	Musical Herald
Cassell's Saturday Magazine	Natural Science
Century Magazine	Nature
Chamber of Commerce Journal	Navy List
Chamber's Journal	New York Herald
Colonies and India	Nineteenth Century
Commerce	North American Review
Contemporary Review	Odd Fellows' Magazine
Cornwall Herald (Jamaica)	Presbyterian (Jamaica)
Edinburgh Review	Proceedings of the Zoological Society
Engineering	Public Opinion
English Illustrated Magazine	Publisher's Circular
English Mechanic	Punch
Entomological News	Queen
European Mail	Review of Reviews
Field	Revue des deux Mondes
Fortnightly Review	Saturday Review
Gall's News Letter (Jamaica)	Scientific American
Gardener's Chronicle	“ Supplement and Building Edition
Gardner's Monthly (Jamaica)	Scribner's Magazine
Geographical Journal	Spectator
Graphic	Strand Magazine
Gleaner (Jamaica)	Sugar Cane
Harper's Magazine	Timehri (British Guiana)
Home Art Work	Times (London), Daily
Illustrated London News	Times (“) Weekly
Jamaica Advocate	Tropical Agriculturist
Jamaica Baptist Reporter	West Indian and Commercial Advertiser
Jamaica Churchman	Winkler's Musical Monthly (Jamaica).

APPENDIX F.

Additions to the Museum.

LIST OF DONORS.

Neish, Dr. W. D.	...	Squilla and Lobster.
Matthews, R. T.	...	Spiders, Water Scorpions.
Rouse, F. G.	...	Scorpion, Centipede, Spiders, Fly with fungi.
Swainson, Mrs.	...	Scorpion, Land, Planarian, Slugs, <i>Peripatus</i> , Fishes.
Moxsy, S.	...	Various Insects and Scorpions.
Briggs, J. E.	...	Collection of Shells.
MacKinnon, L. F.	...	Insect cacoon, Moths, Locust.
Hopwood, Joseph	...	Spotted chinned Snakes; Wood slave.
Bowrey, J. J.	...	Spotted chinned Snake, Centipede, various Insects and Larvæ.
Salmon, E. L.	...	Shell of Pteropod, Scale-insects.
Marescaux, O.	...	Rat Bat, Beetle.
Sturridge, F. B.	...	Beetle, Scorpion, Spider.
Josephs, Hector	...	Hawk, Sparrow-Hawk.
Lewin, Mrs. M.	...	Hair-ball from Cow.
Duerden, J. E.	...	Sea Anemones, and other marine objects, Rats and Bats.
Cargill, Dr.	...	Beetles, Water Scorpions, Millepede, Eggs of Slug, various Insects and Larvæ.
Gunter, T.	...	Two whistling Frogs, Scorpions, Lizards.
Scotland, Rev. H.	...	White ant's nest.
Hall, Mrs.	...	False Locust, ornamental stone.
Townend, A.	...	Various insects, Two-headed Snake, Fishes, Chrysalis and Grub.
O'Meally, J.	...	Two-headed Snake, various Insects and Larvæ.

LIST OF DONORS—*Continued.*

Savariau, Miss A.	...	Insects, Larvæ, Fungus.
D'Aeth, J.	...	Various fossil Hippuritidæ.
Russell, Dr. Logan	...	Two spotted chinned Snakes.
Dicks, E. B.	...	Croaking Lizard.
Sutton, L.	...	Fossils and Minerals.
Douet, Mrs. A. W.	...	<i>Scolia atrata</i> .
Hatch, D.	...	Spotted chinned Snake, Moths.
Lopez, A. E.	...	Croton stems bored by Beetles.
Williams, Stafford	...	Earwig, Cricket, Beetle.
Dewar, Dr. C. T.	...	Parasitic worms, May Beetles.
Campbell, D.	...	Millepede, Scale and other insects, Earth-worms, slugs.
Simpson, P.	...	Slug and Centipede.
Duerden, Mrs. J. E.	...	Spotted chinned Snake, Bat, various insects.
Manners, Dr. J. T.	...	Wood-boring Beetles.
George, Arthur	...	Spotted chinned Snake, Ant's nest, Praying insect, Glow-worm, Plant Lice, Locust, Slugs, Centipedes.
Williams, E. H.	...	Millepede, Larvæ of May Beetle.
McGahan, A. H.	...	Collection of Spiders.
Hall, C. H.	...	Croaking Lizard, Scorpion, Galliwasp, Fly, Insects.
Plaxton, Dr.	...	Muræna, Yellow Snake.
Van Cuylenberg, T.	...	Squillas, Cricket.
Lynch, E. B.	...	Spotted chinned Snake.
Hooper, F.	...	Collection of varieties of Bees.
Jarvis, P. W.	...	2 Squillas, collection of 21 named crabs, Eggs of mollusc.
Strachan, Dr.	...	Moths and Insect Larvæ.
Barrett, Miss Moulton	...	Yellow Boa, Hawk-moth and other Pupæ.
Stone, Miss	...	Collection of various Insects.
Henderson, A. F.	...	Scorpion-Spider, Tarantula.
Cradwick, W.	...	Cricket, <i>Gryllus septentrionalis</i> , Pimento borer, and various objects.
Fawcett, Hon. W.	...	Various Insects, Scorpions, Centipedes.
Duff, George	...	Locust, Spiders.
Panton, E. Stewart	...	Live <i>Peripatus</i> , Leaf Insect.
Westmoreland, A. C.	...	Various Insect Larvæ.
Mould, G. A. H.	...	Live Tortoise.
Hart, A. J.	...	Various collections of Insects.
Corby, E. C.	...	Beetles, Fireflies and Slugs.
Francis, Mrs.	...	Trap Door Spider, Moth.
Pryce, Miss Vaughan	...	Collection of Insects.
Hay, C. H.	...	Typhlops.
Grabham, Dr.	...	<i>Strongylus micrurus</i> , <i>S. contortus</i> , <i>Distoma</i> .
Brennan, Miss	...	3 Photographs.
Hall, W. G.	...	Centipedes, Snake, Herrings, Insects.
Harvey, Dr. O. C.	...	Squilla.
Murray, Dr.	...	Leaf Insect.
Farquharson, J. M.	...	Spotted chinned Snake.
Solomon, E. L.	...	Crab, Spider, Scale Insects.
Chapman, C.	...	Green Lizard, Centipedes, Fly and Larvæ.
Harris, W.	...	Worms, Insects, Scorpion.
Rouse, W. H.	...	Various Insects.
Hylton, Arthur	...	Water Beetles.
Henderson, Dr.	...	23 Scorpions, various Insects, Spiders, Worms.
Henderson, Miss	...	Scorpions.
Davidson, J.	...	Monkey Tamarinds.
Brennan, J. F.	...	Coney Bone, Photograph of Galdy's tomb.
Sabonadiere, W. A.	...	Slug, Spotted chinned Snake.
Paul, Dr.	...	Fern, <i>Schizea elegans</i> .

Donations have also been received from the following :—

Leo. A. Wates, C. A. Lopez, James DaCosta, Mrs. Pearce, C. B. Taylor, J. McCartney, Philip Black, C. H. Randall, John Duff, A. C. Bancroft, Frank Richards, G. E. D. Astwood, Mrs. Gosset, Mrs. Munroe, Thos. Capper, W. Barrett, T. Holwell, F. G. Bather, Capt. Burton, G. Cockburn, E. A. Glen, Louis Malabre, R. Johnstone, A. L. Browne, R. Tucker, A. Bramwell, C. Shand, C. S. Depass, W. I. Harrison, F. DaCosta, Miss H. Beckford, A. Rodrigues, S. F. Royes, W. B. Thomas, A. Sloley, A. Jones, F. Madden, W. Ramsay, Josiah Cork, W. Lee, J. Colthirst, L. B. Melville, Mrs. Hopkins, W. S. Pickwick, Mrs. Hemans, Rev. E. D. Tingling, R. Cocking, W. Walker, F. N. Isaacs, Dr. Sturridge, A. Soutar, J. McLean, C. Walters, R. Curtin, W. Y. Thompson, Rev. W. A. Baillie, D. White, J. Muir, A. Magill, Fred. Kemble, R. M. Clark, John Tillman, Rev. James Roberts, Joseph Hall, Foster Carpenter, Karl Bonitto, J. W. Brennan, C. Helwig, Joseph Edwards, J. E. C. Brown, Miss Chapman, Dr. MacPhail, G. E. Middleton, H. T. Steer, E. Elliot, M. Messias, W. Orrett, R. Bloomfield, C. Steer, D. Harley, T. Pinnock, R. K. Tomlinson, G. Thwaites, Rupert Lyon, Mrs. Lofthouse, H. J. Whitney, C. B. Moulton, Charles Smith, Andrew Brown and J. C. Ford.

APPENDIX G.

Special Contributions to the Anthropological Exhibition.

(a.) *Donations.*

- Gosset, B. S., and Rumsey, Rev. W. W.—Collection of Human Crania and other bones, pottery, shells, and supposed cedar-wood canoe from the Halberstadt cave.
- Turner, Rev. Dr. W. Y.—Stone implement.
- Douet, G. A.—Four American Indian Flint Arrow-heads.
- Sanguinetti, F. S.—Bone spear-heads and perforated shell necklace from Tierra del Fuego.
- Neish, Dr. G. J.—Collection of 20 stone implements.
- Johnstone, Dr. J.—Five stone implements.
- Plant, W. H.—Sixteen stone implements.
- Vendryes, H.—Mealing stone Roller.
- Hannan, W. B.—Mealing stone Roller.
- Bowrey, J. J.—Leg of Mealing Stone.
- Plaxton, Dr. J. W.—Photograph of supposed Indian, and collection of objects from shell-heap at Belle Vue, St. Ann.
- Domville, R. T.—Roller for mealing stone; two lower jaws, portions of cranium, and pieces of pottery from California cave, St. James.
- British Museum, Barbadian shell implement.
- Clerk, J. H.—Collection of objects from the Wales shell heap. Collected by J. E. Duerden.
- Dewar, Dr. C. T.—Collection of shells, bones, pottery, &c., from the Stewart Castle shell-mounds. Collected by Mr. A. Townend and J. E. Duerden.
- Rickets, J.—Stone implement. . . .
- Shore, J., and Robertson, W.—Collection of pottery and bones from California Cave, St. James: Collection of shells, pottery, bones, &c., from shell-mound on Sheep Pen Pasture, California Estate, St. James. Collected by J. E. Duerden.
- Turnbull, Edgar—Collection of shells, pottery, bones, &c., from shell-mounds on Spotty Hill and Mammee Hill, Tryall Estate, St. James. Collected by Mr. Melville and J. E. Duerden.
- Roper, F.—Collections of shells, pottery, &c., from Retreat shell-mounds, St. Ann. Collected by J. E. Duerden.
- Verley, Louis—Collection of shells and pottery from the Hope shell-mounds. Collected by J. E. Duerden.
- Scotland, Rev. H.—Oval shaped stone.
- Elworthy, A. W.—Polished negro ornament, from Cambridge Hill.
- Jones, A. H.—Collection of human bones and skulls from Dake St., Kingston, per Mr. E. L. Salmon.
- Trench, Dutton.—Stone implements and mealing stone roller.
- Gosset, B. S.—Stone implements from Halberstadt, per Hon. W. Fawcett.
- Nicholas, F. C.—Collection of 10 American flint arrow-heads, from Missouri State.
- Upton, H. E.—Collection of Mexican flaked flint arrow-heads.

(b.) *Lent specially for Exhibition.*

- Deans, H. P.—Two stone implements from Priestman's River.
- Campbell, Hon. D.—Two stone images and chisel shaped stone implements.
- Blake, Lady.—Aboriginal skull in earthenware vessel, limb-bones, cast of monolithic axe, 18 stone implements, perforated shells of *Oliva reticularis*.
- Barrett, Miss Moulton.—65 pieces of earthenware, from Retreat shell-mound; 17 stone implements.
- Lynch, E. B.—Mealing stone and roller.
- Rumsey, Rev. W. W.—Stone implement from cave at Kalorama; skull, bones and pottery from cave at Butney Bay, St. Thomas; 5 skulls and earthenware vessels, and perforated shells of *Oliva reticularis*, from Cambridge Hill Cave, St. Thomas; stone implements from Manning's Hill, St. Andrew.
- Church, Inspector—171 stone implements.
- Carter, Miss—2 Peruvian Jugs and Harpoon.
- Marescaux, O.—12 specimens of ancient and modern Chiriqui Indian pottery.
- Messiah, Rev. J.—Barbadian shell and other implements and modern pottery.
- Campbell, John—Stone implements.
- Henderson, Dr.—3 pieces of Chiriqui Indian pottery.
- Bather, F. G.—Stone Image or Pestle.
- Bindley, Rev. T. H.—Collection of 23 Barbadian shell implements and other objects.

APPENDIX H.

*Notes from the Museum**Mostly published in the Kingston daily newspapers.*

- A Morning with the Fishermen in Kingston Harbour.
- Capture of a Snake in Kingston, 1st May, 1895.
- The Pipe Fish, 11th May.
- The Two-Headed Snake, 21st May.
- Removal of the Arawak Remains from Kalorama, 27th May.

Notes from the Museum, &c.—Continued.

Death of a Yellow Snake in Kingston, 15th June.
 The Cattle Disease, 11th July.
 Destruction of Turtles' Eggs, 13th July.
 Jamaica at the "Zoo."
 A Flower-eating Beetle, 17th July.
 Cattle infested by lice, 8th Aug.
 Capture of large Herrings in Kingston Harbour, 13th Aug.
 The Macaca worm, 13th Aug.
 Entomological Notes from Mountain Spring, 17th August.
Scolia atrata. The Firefly, 23rd Aug.
 A supposed phase in Jamaica Natural History, 4th Sept.
 Pork infested with bladder-worms, 7th Sept.
 Ramie attacked by Insects.
 Destruction of Coconut Trees in the United States of Columbia by a large Beetle.
 Sweet Potatoes eaten by White or Duck Ants. The Macaca worm and Water Beetles—Luminous—
 insects and Larvæ. Yellow Snakes in St. Mary—The Hawk's-bill Turtle *Caretta Imbricata*.
 12th Sept.
 Important discovery of Aboriginal Indian Remains, 25th Nov.
 The Scorpions of Jamaica. A Wood-boring Beetle, 25th Sept.
 Various Jamaica Snakes, 5th Oct.
 Notes on Reptiles, Fishes and Insects added to Museum, 6th Nov.
 The Anthropological Exhibition, 7th Nov.
 The Halberstadt Cave Remains, 15th Nov.
 Additions to the Anthropological Exhibition, 20th Nov.
 Aboriginal Remains in Caves in Jamaica, 23rd Nov.
 Destruction of Orange Trees by White Ants, 30th Nov.
 The Scorpion Spider or Pedipalp, 12th Dec.
 Aboriginal perforated Shell Ornaments, 17th Dec.
 Discovery of Shell-mounds and Rock-carving in Trelawny, 14th Jan. 1896.
 Aboriginal Jamaica Idols.
 The Rock-carving at Pantrepant, Trelawny.
 Aboriginal Calcedony Beads.
 The Discovery of Shell-mounds in Trelawny. (1) The Wales shell-mounds, (2) The Stewart Castle
 shell-mounds.
 A new type of Jamaica stone implement.
 Jamaica Anthropology. (1) The Retreat shell-mounds. (2) The Tryall shell-mounds. (3) The Cali-
 fornia shell-mounds.
 The California Cave, St. James.
 Recent Discoveries in Jamaica Anthropology, "Jamaica Churchman" 23rd March, 1896.
 The Indian and the African in Jamaica, "Jamaica Churchman," Christmas number.
 A search for Sea-anemones in Kingston Harbour. "Gardner's Monthly," June, 1895.
 Discovery of Aboriginal Remains in Jamaica, "Nature," 20th June, 1895.

APPENDIX I.

Return of the visitors in the Museum for the year ended March 31st, 1896, month by month, compared
 with that of the previous year.

			1895-96.	1894-95.
April	...	...	410	487
May	...	...	592	325
June	...	...	332	344
July	...	...	376	236
August	...	...	531	295
September	...	...	654	390
October	...	...	364	456
November	...	...	593	341
December	...	...	510	218
January	...	...	615	452
February	...	...	538	340
March	...	...	589	857
			<hr/> 6,104	<hr/> 4,740
			4,740	
			<hr/>	<hr/>
Increase	...		1,364 = 28 per cent.	

APPENDIX J.

*Additions to the Art Gallery of the Institute.**(a) Jamaica Portrait Gallery.*

The following is a list of the portraits which have, during the year, been added to the Jamaica Portrait Gallery :—

67. Rev. Walter Dendy, Baptist Missionary d. 1882. [Presented by the Rev. J. Seed Roberts.]
68. Rev. James Watson, Presbyterian Missionary, b. 1799, d. 1873.
69. Father Joseph Dupont, Roman Catholic Priest, b. 1809, d. 1889. [Presented by the Right Rev. the Bishop of Thyatira.]
70. William Wemyss Anderson, Philanthropist, b. 1802, d. 1877.
71. Rev. Edmund Hickeringill, Divine, b. 1631, d. 1708.
72. Sir Joshua Rowe, Chief Justice of Jamaica, b. 1797, d. 1874. [Bequeathed by Mrs. Matthew Thompson.]
73. Rev. Isaac Lopez, Jewish Minister, b. 1782-83, d. 1854. [Presented by Oscar Marescaux, Esq.]
74. Hon. Edward Jordon, C.B., b. 1800, d. 1869 (second portrait). [Presented by Mrs. Daughtrey.]

(b.) Miscellaneous Engravings.

- Newcastle, Jamaica.—By Joseph Kidd, after a drawing by W. J. Kidd, Kingston, 1846. (Coloured Lithograph).
- Newcastle, Jamaica.—By Joseph Kidd after a drawing by W. J. Kidd, Kingston, 1846. (Coloured Lithograph.)
- South-west view of Christ Church, Port Antonio, Jamaica.—From a drawing by H. Annesley Voysey, Architect of the Church, 1843. (Coloured Lithograph).
- Sketch of Bamboos and Cotton-trees, Westmoreland.—By J. B. Kidd. (Coloured Lithograph.)
- Wild Fig and Indian God Tree.—By J. B. Kidd. (Coloured Lithograph.)
- Town of Bath, St. Thos. ye East. By J. B. Kidd. (Coloured Lithograph.)
- Cocanut Walk on the Coast near Runaway Bay, St. Ann.—By J. B. Kidd. (Coloured Lithograph.)
- Bog Walk, St. Thomas ye Vale.—By J. B. Kidd. (Coloured Lithograph.)
- City of Kingston, looking north.—By J. B. Kidd. (Coloured Lithograph.)
- City of Kingston, looking south.—By J. B. Kidd. (Coloured Lithograph.)
- St. Ann's Bay. —By J. B. Kidd. (Coloured Lithograph.)
- Claremont Pen, St. Mary —By J. B. Kidd. (Coloured Lithograph.)
- Lethe Estate, on the Great River.—By J. B. Kidd. (Coloured Lithograph.)
- Distant View of the Plains of Westmoreland—By J. B. Kidd. (Coloured Lithograph.)
- Vessels leaving Port Royal.—By J. B. Kidd.
- Prospect of Ora Cabeca, Parish of St. Mary.—Line Engraving, London, 1770.
- Prospect of Port Antonio, Parish of Portland.—Line Engraving, London, 1770.
- View of Dry Harbour, Parish of St. Ann. - Line Engraving, London, 1769.
- View of Lucea, Parish of Hanover.—Line Engraving, London, 1770.
- Searborough Bay in the Island of Tobago. Engraving by C. Rosenberg after a sketch by D. MacArthur, (Coloured) London 1834.
- West Indian View. (Coloured Lithograph.)
- Kingston, St. Vincent.—(Coloured Lithograph.)
- St. John's Harbour, Antigua.—After a drawing by J. Johnson, London, 1827. (Coloured Lithograph.)
- St. John's Harbour, Antigua.—After a drawing by J. Johnson, London, 1827. (Coloured Lithograph.)
- Estridge's, Nicola Town, St. Christopher's.—By J. Johnson. (Coloured Lithograph.)
- Calliagua, Island of St. Vincent.—By J. Johnson. (Coloured Lithograph.)
- St. John's, Antigua.—By J. Johnson. (Coloured Lithograph.)
- Negroes dancing in the Island of Dominica.—(Coloured). Engraving by A. Brunias, London, 1779.
- Cudgelling Match between English and French negroes in the Island of Dominica.—London, 1779.

APPENDIX K.

List of Institutions to which the Journal is sent.

Note.—Publications are received in exchange from those Institutions marked with a *

I. JAMAICA.

Bethlehem, Moravian Training College for Females.
 Fairfield, Moravian Training College for Males.
 Hope, St. Andrew, University College.
 Kingston, Calabar College.
 Kingston, Jamaica Church Theological College.
 Kingston, Mico Training College.

Kingston, Constabulary Reading Room.
 *Kingston, Weather Office.
 Kingston, Garrison Institute, Reading Room, Up-Park Camp
 Shortwood, St. Andrew, Female Training College.
 Montego Bay Reading Club.
 Potsdam School.
 Port Royal, Garrison Reading Room.
 Savanna-la-Mar, Self-Help Institute.
 York Castle, Wesleyan High School.

II. WEST INDIES.

Basse-terre, Guadeloupe, Public Library.
 Basse-terre, St. Kitts, Botanical Station.
 Berbice, British Guiana, Public Library.
 Bridgetown, Barbados, Botanical Station.
 Castries, St. Lucia, Botanical Station.
 Fort Royal, Martinique, Botanical Station.
 *Georgetown, British Guiana, The Museum.
 Grand Turk, Turks Island, Jubilee Library.
 Kingstown, St. Vincent, Botanic Gardens.
 Nassau, New Providence, Public Library.
 Plymouth, Montserrat, Botanical Station
 *Port of Spain, Trinidad, Botanic Gardens.
 *Port of Spain, Trinidad, Field Naturalists' Club.
 Roseau, Dominica, Botanical Station.
 St. George's, Grenada, Botanic Garden.
 St. John's Antigua, Public Library.
 St. John's Antigua, Botanical Station.
 St. John's Antigua, Society of Agriculture.

III. THE UNITED KINGDOM.

Birmingham, The Mason Science College.
 *Kew, Royal Botanic Gardens.
 *London, British Museum Library.
 *London, British Museum Library (Natural History Branch).
 *London, Guildhall Library.
 *London, Imperial Institute.
 *London, Colonial Office, Downing St.
 London, Library of the Entomological Society of London.
 London, Library of the Linnean Society.
 London, Library of the Royal Society.
 London, Library of the Zoological Society.
 *London, Royal Colonial Institute.
 *London, Royal Geographical Society.
 London, Society of Arts.
 *Newcastle-on-Tyne, Geographical Society.
 Edinburgh, Royal Society of Edinburgh.
 Dublin, Royal College of Science.
 Dublin, Royal Irish Academy.
 *Dublin, Royal Dublin Society.

IV. OTHER EUROPEAN COUNTRIES.

*Berlin, Germany, Königliche Akademie der Wissenschaften.
 Hamburg, Natural History Museum.
 *Helsingfors, Russia, La Societas pro Fauna et Flora.
 *Modena, Italy, Societa dei Naturalisti di Modena.
 *Paris, France, Museum d'Histoire Naturelle.
 *Rome, Accademi dei Lincei.
 Stockholm, Sweden, La Société Entomologique.
 Vienna, Zoologische-botanische Gesellschaft.

V. CANADA.

Halifax, The Museum.
 *Halifax, The Nova Scotian Institute of Science.
 *Hamilton, The Hamilton Association.
 *Toronto, The Canadian Institute.

VI. THE UNITED STATES OF AMERICA.

Boston Natural History Society.

Boston, Public Library.

*Florida, Department of Agriculture.

*Massachusetts, Tufts College Library.

New York, Astor Library.

*North Carolina, Elisha Mitchell Scientific Society.

*Ohio, State Academy of Science.

*Philadelphia, American Philosophical Society.

*Washington, Department of Agriculture.

*Washington, Department of the Interior, Geological Survey.

*Washington, Smithsonian Institution.

*Washington, U. S. National Museum.

VII. NORTH AMERICA.

Hamilton, Bermuda, Public Library.

VIII. SOUTH AMERICA.

*Santiago, Chili, Société Scientifique du Chili.

IX. AUSTRALIA.

*Sydney, New South Wales, Department of Mines.

*Sydney, New South Wales, Geological Survey.

*Sydney, New South Wales, Public Library.

*Sydney, New South Wales, Royal Society.

X. NEW ZEALAND.

*Wellington, New Zealand Institute.

XI. INDIA.

Calcutta, The Indian Museum.

APPENDIX L.

REPORT ON JAMAICA TIMBERS, FROM THE IMPERIAL INSTITUTE AUTHORITIES.

Imperial Institute Scientific and Practical Research Department.

Testing of Colonial Timbers, by Professor W. C. UNWIN, F.R.S. (Member of the Committee of Advice).

Table I.—Tests of Moisture of Transverse Specimens.

No. of Specimen.	Name.	Date of Test.	Weight of Chips.		Loss in Weight. Grammes.	Moisture per cent. reckoned on Weight of Dry Wood. o/o.
			Initially. Grammes.	After Drying in Oven. Grammes.		
1895.						
35a.	Satin Wood	... June 17 ^a	6.770	6.053	0.717	11.85
36a.	Satin Wood	... " "	5.989	5.324	0.665	12.49
39a.	Cashaw Wood	... " "	5.023	3.999	1.024	25.60
33a.	Lignum Vitæ	... " 18	7.931	6.980	0.951	13.62
42b.	Lignum Vitæ	... " "	6.298	5.653	0.645	11.41
44b.	Rosewood	... " "	4.567	4.240	0.327	7.71
47a.	Bastard Cabbage	... Oct. 15 ^a	7.606	4.765	2.841	59.62
48a.	Yoke Wood	... " "	9.321	5.821	3.500	60.12
49a.	Spanish Elm	... " "	5.572	3.972	1.600	40.28
50a.	Calabash	... Oct. 16 ^a	5.701	3.200	2.501	76.43
51a.	Naseberry Bullet	... Oct. 15	8.645	6.096	2.549	41.89
52a.	Red or Cherry Bullet	... Oct. 16	8.191	5.279	2.912	55.16
53a.	Mountain Mahoe	... Dec. 5 ^a	4.259	3.161	1.098	34.73
54b.	Mammee Sapota	... " "	6.672	5.082	1.590	31.96
55a.	Mammee	... " "	6.509	4.719	1.790	37.92
56a.	Prune	... Dec. 13	6.047	3.985	2.062	51.74
57b.	Mountain Guava	... " "	6.494	4.898	1.596	32.58
58a.	Hog-gum	... " "	6.860	4.848	2.012	41.50
1896.						
60a.	Prickly-yellow	... Mar. 31	5.772	4.315	1.457	33.76
61a.	Wannika	... " "	4.905	3.904	1.001	25.63
62a.	Seaside Grape	... " "	5.303	3.318	1.985	59.83 ^a
63a.	Seaside Mahoe	... Mar. 26	5.891	3.906	1.985	50.82
67a.	St. Ann's Yacca	... Mar. 31	4.392	3.299	1.093	33.12

^a It will be seen that the specimens were exceptionally dry.

The Rosewood is a different timber from that commonly known as Rosewood in this country.

^a It will be seen that all these logs contained a high percentage of moisture.^a The timbers had been kept in plank for some time and were drier than those previously tested. They were, however, not so well seasoned as is desirable in test specimens.^a This timber was very wet.Table II.—Heaviness.^a

No. of Specimen.	Name.	Weight of Wood. grammes.	Volume of Water displaced. cub. cent.	Specific Gravity.	Pounds per cubic foot
35c.	Satin Wood	... 1,405.6	1,567.5	0.897	55.99
36c.	Satin Wood	... 1,523.5	1,555.0	0.979	61.15
37c.	Satin Wood	... 1,583.6	1,559.9	1.015	63.37
39c.	Cashaw Wood	... 1,525.2	1,554.2	0.981	61.26
33b.	Lignum Vitæ	... 1,933.2	1,577.6	1.225	76.47
42a.	Lignum Vitæ	... 1,854.2	1,546.3	1.199	74.86
44a.	Rosewood	... 497.8	417.4	1.193	74.45

^a The heaviness determinations were made with the pieces prepared for crushing by displacing water, a correction as usual being made for temperature.

TABLE II.—HEAVINESS (*continued.*)

No. of Specimen.	Name.	Weight of Wood. Grammes	Volume of water displaced. cub. cent.	Specific gravity.	Pounds per cubic foot.
47b	Bastard Cabbage	1719.6	1776.9	.968	60.41
48b	Yoke Wood	2035	1802.6	1.129	70.48
49c	Spanish Elm	1370.5	1793.9	.764	47.69
50b	Calabash	948.4	1082.5	.876	54.69
51c	Naseberry Bullet	2143	1801.2	1.190	74.27
52a	Red or Cherry Bullet	2026	1774.9	1.141	71.26
53a	Mountain Mahoe	611	1139.8	0.536	33.46
54a	Mammee Sapota	1362	1436.9	0.948	59.16
55a	Mammee	1367.5	1392.9	0.982	61.29
56a	Prune	1489	1403.6	1.061	66.23
57b	Mountain guava	1531	1465.7	1.042	65.04
58a	Hog-gum	775	963.4	.804	50.21
60b	Prickly Yellow	1478.5	1521.3	0.972	60.66
61b	Wannika	1614.5	1542.3	1.047	65.34
62b	Seaside Grape	1638.5	1565.3	1.047	65.34
63b	Seaside Mahoe	595.5	769.6	0.774	48.31
67b	St. Ann's Yacca	1116.0	1483.8	0.752	46.95

Table III.—Resistance to Shearing along the Fibres.

No. of Specimen.	Name.	Dimensions. Inches.	Area Sheared. sq. inches.	Shearing Load. Pounds.	Ultimate Shearing Stress.	
					Pounds per sq. in.	Tons per sq. in.
35c	Satin Wood	2.00 x 2.03	4.06	5,320	1,311	0.585
36c	Satin Wood	2.05 x 1.98	4.06	2,775	683.4	0.305
37c	Satin Wood	1.96 x 2.02	3.959	4,370	1,104	0.493
39c	Cashaw Wood	2.10 x 1.92	4.032	7,685	1,906	0.851
33b	Lignum Vitæ	1.98 x 2.04	4.039	4,050	1,003	0.447
42a	Lignum Vitæ	2.11 x 1.90	4.009	11,190	2,791	1.246
44c	Rosewood	2.00 x 1.96	3.92	3,080	786	0.351
47b	Bastard Cabbage	2.02 x 2.00	4.040	4,072	1,008	.450
48b	Yoke Wood	2.05 x 2.02	4.141	2,940	709.9	.317
49c	Spanish Elm	2.01 x 1.99	4.000	3,840	960	.428
50b	Calabash	1.98 x 2.02	4.000	3,205	801	.358
51c	Naseberry Bullet	1.98 x 2.02	4.000	4,506	1,126	.503
52a	Red or Cherry Bullet	2.02 x 2.09	4.222	4,757	1,127	.503
53a	Mountain Mahoe	2.03 x 2.00	4.06	3,055	752	0.336
54b	Mammee Sapota	1.98 x 1.97	3.90	4,850	1,243	0.555
55a	Mammee	2.02 x 1.93	3.90	3,160	810	0.362
56b	Prune	1.98 x 1.95	3.861	6,390	1,655	0.739
57b	Mountain guava	2.05 x 1.97	4.039	3,490	874	0.386
58b	Hog-gum	1.97 x 1.97	3.881	4,020	1,036	0.462
60b (1)	Prickly Yellow	2.00 x 1.99	3.98	4,250	1,068	0.477
(2)	"	2.06 x 1.98	4.08	3,825	805	0.359
				Mean	936	0.418
61b. (1)	Wannika	2.00 x 1.97	3.94	4,970	1,261	0.563
61c. (2)	"	1.96 x 1.98	3.88	3,535	911	0.407
				Mean	1,086	0.485
62b. (1)	Seaside Grape	2.02 x 2.01	4.06	3,295	811	0.362
	"	1.98 x 1.98	3.92	4,350	1,110	0.495
				Mean	960	0.428
67b. (1)	St. Ann's Yacca	1.97 x 1.98	3.90	2,966	760	0.339
(2)	"	1.99 x 1.98	3.94	3,150	799	0.357
					780	0.348

No. 33b (Lignum Vitæ) fractured rather irregularly; the shearing occurred along an annual ring.

No. 42a (Lignum Vitæ) gave a very irregular fracture; in this case the shearing plane was at right angles to the annual ring.

Nos. 52, 56 and 57 gave rather irregular fractures.

The other specimens gave plane fractures.

60b (1) Rather ragged fracture.

60b (2) Ragged and irregular fracture.

61b (1) Rather irregular fracture. Shearing plane not quite parallel to the annual rings.

61c (2) Irregular fracture.

62b (1) Plane fracture.

62b (2) Nearly plane fracture.

67b (1) Plane fracture.

67b (2) Slightly irregular fracture.

Specimens marked 1 had the plane of shearing parallel to the annual rings.

Specimens marked 2 had the plane of shearing at right angles to the annual rings.

Table IV.—Crushing Strength.

No. of Specimen.	Name.	Dimensions.—Inches.		Area of Crushed Section. Sq. in.	Crushing Load. Tons.	Crushing Strength. Tons per sq. in.
		Section Crushed.	Height.			
35c	Satin Wood	3.294 x 3.284	9.03	10.820	47.025	4.346
36c	Satin Wood	3.251 x 3.269	9.00	10.630	45.57	4.287
39c	Cashaw Wood	3.255 x 3.265	9.03	10.629	39.97	3.760
33b	Lignum Vitæ	2.768 x 2.774	8.10	7.679	26.23	3.415
42a	Lignum Vitæ	2.750 x 2.865	8.02	7.879	34.10	4.328
44a	Rosewood	2.426 x 2.219	4.72	5.383	30.76	5.713
47b	Bastard Cabbage	3.41 x 3.53	9.04	12.037	36.00	2.991
48b	Yoke Wood	3.45 x 3.55	9.08	12.247	25.69	2.097
49c	Spanish Elm	3.43 x 3.52	9.05	12.074	26.11	2.163
50b	Calabash	3.33 x 1.88	8.42	6.260	10.62	1.696
50a	Calabash	2.86 x 2.89	8.04	8.265	9.465	1.145
51c	Naseberry Bullet	3.43 x 3.56	9.08	12.21	52.60	4.308
52a	Red or Cherry Bullet	3.40 x 3.55	9.00	12.07	43.04	3.566
53a	Mountain Mahoe	2.829 x 3.137	7.95	8.875	17.50	1.973
54b	Mammee Sapota	3.231 x 3.143	8.61	10.160	36.26	3.569
55a	Mammee	3.100 x 3.209	8.49	9.948	32.15	3.232
56b	Prune	3.300 x 3.047	8.60	10.06	34.54	3.433
57b	Mountain Guava	3.333 x 3.173	8.45	10.57	40.555	3.837
58b	Hog Gum	2.823 x 2.763	7.50	7.80	22.735	2.915
60b	Prickly Yellow	3.376 x 3.229	8.52	10.903	19.375	1.777
61b	Wannika	3.362 x 3.295	8.52	11.090	30.75	2.773
62b	Seaside Grape	3.376 x 3.327	8.51	11.233	28.28	2.517
63b	Seaside Mahoe	2.332 x 2.489	8.06	5.804	12.86	2.212
67b	St. Ann's Yacca	3.343 x 3.222	8.50	10.771	27.525	2.555

No. 36 (Satin Wood) and No. 39 (Cashaw) broke by shearing.

No. 35 (Satin Wood) broke by splitting along the grain.

No. 33 (Lignum Vitæ) split vertically along an annual ring containing a knot.

No. 42 (Lignum Vitæ) and No. 44 (Rosewood) broke partly by vertical splitting and partly by shearing.

Nos. 47, 48 and 49 broke fairly by shearing.

Both specimens of No. 50 went by bending laterally. This timber was very wet. Both the crushing prisms and the bars for bending were of good size.

Both 51c. and 52a. broke fairly by shearing.

Nos. 53a, 54b, 55a, 56b, 57b, 58b, 60, 62, and 63 broke by shearing.

No. 53 proved to be rotten in the interior.

Nos. 67 and 61 broke partly by shearing and partly by vertical splitting.

Table V.—Resistance to Bending.

No. of Specimen.	Name.	Date of Testing.	Transverse Dimensions. Inches.		Clear Span. Inches.	Centre Breaking Load. Pounds.	Co-efficient of Transverse Strength.	
			Breadth.	Depth.			Pounds per sq. in.	Tons per sq. in.
		1895.						
35a	Satin Wood ...	June 17 ¹	3.259	3.241	45	3,500	(6,901)	(3.081)
36a	Satin Wood ...	" "	3.217	3.263	48	7,060	14,844	3.627
39a	Cashaw Wood ...	" " ¹	3.046	3.053	36	7,580	14,420	3.437
33a	Lignum Vitæ ...	" 18	3.248	3.274	48	5,296	10,950	4.888
42b	Lignum Vitæ ...	" "	3.244	3.240	48	3,230	(6,828)	(3.048)
44b	Rosewood ...	" "	2.147	2.136	22	4,473	15,070	6.726
47a	Bastard Cabbage ...	Oct. 15 ^a	3.473	3.434	48	6,935	12,190	5.443
48a	Yoke Wood ...	" "	3.658	3.430	48	4,070	6,810	3.040
49a	Spanish Elm ...	" "	3.537	3.404	48	3,480	6,113	2.730
50a	Calabash ...	" 16 ^a	2.982	2.987	32	3,250	5,862	2.617
51a	Naseberry Bullet ...	Oct. 15 ^b	3.549	3.434	48	11,930	20,520	9.163
52b	Red or Cherry Bullet ...	" 16 ^b	3.425	3.502	48	8,000	13,710	6.122
53a	Mountain Mahoe ...	[Not given]	2.829	3.145	36	3,760	7,256	3.240
54b	Mammee Sapota ...	" "	3.370	3.125	42	8,140	15,580	6.956 ^a
55a	Mammee ...	" "	3.119	3.166	42	8,265	16,650	7.435
56a	Prune ^c ...	" "	3.075	3.226	48	6,320	15,340	6.850
57b	Mountain Guava ^c ...	" "	3.123	2.865	32	9,920	18,580	8.292
58a	Hog-gum ^c ...	" "	3.110	2.882	36	5,510	11,520	5.141
60a	Prickly Yellow ...	" "	3.383	3.257	50	2,900	6,060	2.706
61a	Wannika ...	" "	3.235	3.335	50	3,150	6,566	2.932
62a	Seaside Grape ...	" "	3.155	3.398	50	4,500	9,264	4.135
63a	Seaside Mahoe ...	" "	3.244	2.359	28	4,285	9,969	4.450
67a	St Ann's Yacca ...	" "	3.370	3.111	50	5,000	11,500	5.133

¹ No. 35a (Satin Wood) broke by tension at a knot. The result is no doubt below the proper breaking strength.

Nos. 36a (Satin Wood) and 39 (Cashaw Wood) broke by tension fairly.

No. 33 (Lignum Vitæ) broke by tension at a small knot.

No. 42 (Lignum Vitæ) broke by tension at a knot. The result is no doubt below the proper breaking strength.

No. 44 (Rosewood) broke by tension fairly.

2. Each of the specimens broke by tension. No. 48 (Yoke Wood) went suddenly, without the gradual splitting which is usual in timber at the breaking point. The deflections were noted at about each 500 lbs. of load during the bending test. These deflections, as in all previous tests, made for the Imperial Institute, are the deflections on first loading.

3. Both specimens broke by tension fairly.

4. It was difficult to obtain a good transverse bar out of this log. The bar tested appeared sound outside but it broke at an extensive rotten layer. The strength, no doubt, is lower than that of a sound bar.

5. Each specimen broke by tension.

No. 60 broke suddenly at a weak place considerably out of centre. The later specimens broke fairly by tension.

Table VI.—Deflections observed in the Bending Tests.

Centre Load. Pounds.	No. 35a.		No. 36a.		No. 39a.		No. 33a.		No. 42a.		No. 42b.	
	Increment of Deflection.	Total Deflec- tion. Inches.	Increment of Deflection.	Total Deflec- tion. Inches.	Increment of Deflection.	Total Deflec- tion. Inches.	Increment of Deflection.	Total Deflec- tion. Inches.	Increment of Deflection.	Total Deflec- tion. Inches.	Increment of Deflection.	Total Deflec- tion. Inches.
250	.032	.032	.042	.042	.026	.026	.052	.052	.056	.056	.014	.014
500	.034	.066	.020	.062	.020	.046	.052	.104	.054	.110	.016	.030
750	.034	.100	.046	.108	.024	.070	.056	.160	.076	.186	.012	.042
1,000	.032	.132	.028	.136	.024	.094	.054	.214	.048	.234	.016	.058
1,250	.030	.162	.038	.174	..	..	.056	.270	.078	.312	...	...
1,500	.034	.196	.038	.212	.046	.140	.054	.324	.056	.368	.030	.088
1,750	.036	.232	.026	.238	...	...	.056	.380	.046	.414	...	...
2,000	.024	.256	.026	.264	.042	.184	.034	.414	.070	.484	.028	.116
2,500	.084	.340	.064	.328	.038	.220	.140	.554	.228	.712	.028	.144
3,000	.056	.396	.090	.418	.054	.274	.106	.660	..	...	.034	.178
3,500	...	...	.064	.482	.046	.320	.130	.790	...	...	.044	.222
4,000	...	...	.080	.562	.042	.362	...	...	...	...	...	...
4,500	...	...	.054	.616	.052	.414	...	...	...	...	...	...
5,000	...	...	.088	.704	.044	.458	...	...	...	...	...	...
5,500	...	...	.080	.784	.046	.504	..	...	...	...	...	...
6,000	...	...	.266	1.050	.086	.590	...	...	...	...	...	...
6,500	...	...	...	...	.056	6.46	...	...	...	...	...	...
7,000	...	...	...	...	.093	.742	...	...	...	...	...	...

Centre Load. lbs.	No. 47a.		No. 48a.		No. 49a.		No. 50a.	
	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.
500	.070	.070	.140	.140	.080	.080	.094	.094
1,000	.048	.118	.168	.308	.084	.164	.104	.198
1,500	.054	.172	.136	.444	.062	.226	.102	.300
2,000	.104	.276	.140	.584	.088	.314	.182	.482
2,500	.060	.336	.218	.802	.086	.400	.112	.594
3,000	.076	.412	.194	.996	.052	.452	.578	1.172
3,500	...	...	.214	1.210	...	...	...	...
4,000	.106	.518	.314	1.524	...	...	...	...
4,500	...	...	...	...	...	...	...	...
5,000	.200	.718	...	...	...	...	...	...
5,500	...	...	...	...	...	...	...	...
6,000	.264	.982	...	...	...	...	...	...

Centre Load. Pounds.	No. 51a.		No. 52b.	
	Increment of Deflection.	Total Deflection. Inches.	Increment of Deflection.	Total Deflection. Inches.
0				
500	.046	.046	.038	.038
1,000	.046	.092	.044	.082
1,500	.046	.138	.042	.124
2,000	.026	.164	.036	.160
2,500	.052	.216	.074	.234
3,000	.026	.242	.036	.270
3,500	...	...	.048	.318
4,000	.076	.318	.042	.360
4,500	...	...	.034	.394
5,000	.094	.412	.070	.464
6,000	.078	.490	.120	.584
7,000	.098	.588	.146	.730
8,000	.110	.698	.304	1.034
9,000	.082	.780	...	...
10,000	.190	.970	...	...
11,000	.206	1.176	...	...

Centre Load.		No. 53a.		No. 54b.		No. 55a.	
Pounds.		Increment of Deflection. ins.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection. ins.	Total Deflections. ins.
0							
250		.036	.036	.027	.027	.018	.018
500		.045	.081	.028	.055	.018	.036
750		.040	.121	.032	.087	.036	.072
1,000		.035	.156	.025	.112	.025	.097
1,250		.039	.195				
1,500		.047	.242	.053	.165	.032	.129
1,750		.041	.283				
2,000		.043	.326	.051	.216	.048	.177
2,500		.080	.406	.057	.273	.049	.226
3,000		.091	.497	.051	.324	.061	.287
3,500		.116	.613	.052	.376	.048	.335
4,000				.051	.427	.041	.376
4,500				.047	.474	.058	.434
5,000				.065	.539	.053	.487
5,500				.067	.606	.049	.536
6,000				.067	.673	.069	.605
6,500				.067	.740	.090	.695
7,000				.066	.806	.097	.792
7,500				.125	.931	.145	.937
8,000				.157	1.088	.280	1.217

Centre Load.		No. 56a.		No. 57b.		No. 58a.	
Pounds.		Increment of Deflection. ins.	Total Deflection. ins.	Increment of Deflection. ins.	Total Deflection. ins.	Increment of Deflection. ins.	Total Deflection. ins.
0							
250		.033	.033	.015	.015	.023	.023
500		.028	.061	.017	.032	.023	.046
750		.030	.091	.016	.048	.018	.064
1,000		.030	.121	.017	.065	.022	.086
1,250						.027	.113
1,500		.058	.179	.031	.096	.023	.136
1,750						.021	.157
2,000		.062	.241	.032	.128	.027	.184
2,500		.080	.321	.030	.158	.052	.236
3,000		.069	.390	.025	.183	.052	.288
3,500		.070	.460	.030	.213	.074	.362
4,000		.072	.532	.030	.243	.077	.439
4,500		.074	.606	.029	.272	.120	.559
5,000		.093	.699	.028	.300	.125	.684
5,500		.117	.816	.034	.334		
6,000		.142	.958	.041	.375		
6,500				.049	.424		
7,000				.051	.475		
7,500				.057	.532		
8,000				.054	.586		
8,500				.056	.642		
9,000				.083	.725		

Centre Load. Pounds.	No. 60a.		No. 61a.		No. 62a.		No. 63a.		No. 67a.	
	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.	Increment of Deflection.	Total Deflection. ins.
0										
250	.061	.061	.038	.038	.024	.024	.035	.035	.069	.069
500	.060	.021	.048	.086	.046	.070	.038	.073	.072	.141
750	.061	.182	.049	.135	.050	.120	.040	.113	.064	.205
1,000	.058	.240	.039	.174	.055	.175	.038	.151	.057	.262
1,250	...	...	.037	.211	.046	.221	.042	.193	...	...
1,750	...	...	.041	.299	...	...	...	...	...	...
2,000	.117	.478	.039	.338	.091	.390	.073	.306	.120	.502
2,500	.131	.609	.080	.418	.133	.523	.104	.410	.159	.661
3,000	...	...	.111	.529	.119	.642	.121	.531	.169	.830
3,500	...	...	...	...	.145	.787	.162	.693	.152	.982
4,000	...	...	...	...	.153	.940	...	...	.178	1.160
4,500	...	...	...	...	...	...	...	...	.212	1.372

From these deflections the following values of the co-efficient of elasticity have been calculated for the greatest range of stress in which no marked deviation of proportionality between stress and strain occurred.

Table VII.—Co-efficient of Elasticity from Bending Tests.

No. of Specimen.	Name.	Range of Stress. Pounds per sq. in.	Elastic Deflection. Inches.	Co-efficient of Elasticity.	
				Pounds per sq. in.	Tons per sq. in.
35a	Satin Wood	0 to 3,944	.256	1,747,000	779.8
36a	Satin Wood	0 to 11,560	.784	1,735,900	775.0
39a	Cashaw Wood	0 to 10,460	.504	1,958,000	874.0
33a	Lignum Vitæ	0 to 3,619	.380	1,117,000	498.6
42b	Lignum Vitæ	0 to 1,057	.110	1,139,000	508.5
44b	Rosewood	0 to 9,662	.144	2,208,700	986.0
47a	Bastard Cabbage	0 to 5,274	.412	1,432,000	639.1
48a	Yoke Wood	0 to 3,346	.584	641,440	286.4
49a	Spanish Elm	0 to 4,392	.400	1,239,000	553.0
50a	Calabash	0 to 2,706	.300	515,300	230.1
51a	Naseberry Bullet	0 to 6,882	.318	2,420,000	1,080.0
52b	Red or Cherry Bullet	0 to 7,714	.394	2,147,000	958.4
53a	Mountain Mahoe	0 to 3,860	.326	813,100	363.1
54b	Mammee Sapota	0 to 8,615	.474	1,710,000	763.3
55a	Mammee	0 to 11,080	.536	1,920,500	857.2
56a	Prune	0 to 6,750	.390	2,060,000	919.6
57b	Mountain Guava	0 to 10,300	.334	1,837,000	820.0
58a	Hog-gum	0 to 6,270	.288	1,632,000	728.6
60a	Prickly Yellow	0 to 4,179	.478	1,119,000	499.4
61a	Wannika	0 to 5,211	.418	1,558,000	695.3
62a	Seaside Grape	0 to 2,573	.221	1,428,000	637.4
63a	Seaside Mahoe	0 to 3,489	.233	829,600	370.3
67a	St. Ann's Yacca.	0 to 4,599	.502	1,227,000	547.8

Portions of the logs of Bastard Cabbage, Yoke Wood, and Spanish Elm, have been forwarded to Mr. Allan Ransome, the expert on timbers, who is associated with the Department of Research, for the purpose of examining their working qualities. There was not sufficient of the Calabash sample to allow of its being submitted to this examination. Mr. Ransome reports as follows:—

1. *ANDIRA INERMIS*. (Bastard Cabbage.)—This is a coarse wood, and the sample received was unsound, showing already evident signs of decay. It sawed and planed easily. The wood appears to be of a very perishable nature, and therefore not fit for structural purposes, and possibly even unsuitable for posts and rails.

2. *CATALPA LONGISSIMA*. (Yoke Wood.)—The sample received was very green, and much decayed in one part, this being possibly due to the over-growth of some parasitic plant. When dry, the wood was of a light brownish grey, with cross stripes of a darker colour. It worked easily under the saw and planing machine, and, as it somewhat resembled black walnut, it might be used for similar purposes.

3. *CORDIA GERASCANTHOIDES*. (Spanish Elm). This sample was sound and partially dry. In character it somewhat resembled English Chestnut. It worked readily with ordinary wood-working machinery; it might be applied to the construction of slack and semi-tight casks, but being of a very short grain, it would be liable to break if used for casks of a tighter description, which usually have more bilge. This wood is also suitable for posts and rails, and for general constructive purposes in farms, &c. Mr. Ransome has had a sample cask constructed from this timber, which will be exhibited in the Jamaica Court.

5. *SAPOTA SIDEROXYLON*, (Gr.) Naseberry Bullet Tree. Mr. Allan Ransome reports as follows on the working qualities of this wood:—The sample submitted for trial was easily worked by both sawing and planing machines. It is a straight-grained and sound wood, and could be used to advantage for inside joinery work, flooring, match-boarding, etc., and if, as stated, it lasts well under water, it would also be a good wood for piles and harbour work.

6. *DIPHOLIS NIGRA*, (Gr.) Red or Cherry Bullet Tree. Mr. Ransome reports:—The sample submitted was easily worked by both saw and planes. This wood has more figure than any of those previously described, and might be used for bedroom furniture, and other cabinet work of the cheaper class; it would be useful for all kinds of timber constructions.

*Summary of Results of Tests of Jamaica Timbers, carried out by Professor W. C. Unwin, F. R. S.
Member of the Consultative Committee of the Imperial Institute.*

The specimens of twenty-two timbers received through the Imperial Institute from Jamaica form so interesting and complete a series that it appears worth while to summarize the results. It will then be easier to draw general conclusions as to the relative value of the different timbers.

The lightest timber of the series was Mountain Mahoe, weighing $33\frac{1}{2}$ lb., per cubic foot, or a little less than ordinary pine used in this country. Considering its very low density, its strength is fairly good. Next in order of density is Blue Mountain Yacca, which weighs $38\frac{1}{2}$ lb., per cubic foot and the strength of which is distinctly greater than that of Mountain Mahoe.

The fault of most tropical woods from a constructional point of view is their great hardness and heaviness. Amongst the Jamaica timbers there is a group of very heavy timbers. Yoke wood, Cherry ullet, Naseberry Bullet, Rosewood and Lignum Vitæ, weigh from $70\frac{1}{2}$ to $75\frac{1}{2}$ lb., per cubic foot. Such

woods can only be used for very special purposes. They are all considerably heavier than water. Excepting for shearing, the strength co-efficients of the heaviest wood, Lignum Vitæ, were not very high. It is well known that, in general, the strength of timber increases with the density. The best woods, constructionally, therefore are those which give high strength co-efficients in proportion to their weight per cubic foot. In the following table, the whole of the results on Jamaica timbers are given, the timbers being arranged for comparison in the order of their heaviness. It will be seen that while, broadly speaking, the strength is greatest for the heaviest woods, there are certain timbers which have markedly good co-efficients compared with other timbers of about the same weight.

Amongst woods of specially light weight, Mountain Yacca and St. Ann's Yacca are good. Amongst woods of moderately heavy character, Hog Gum, Yellow Sanders, Satinwood and Mammee Sapota have good strength co-efficients. Amongst woods heavier than water, Prune and the Cherry and Naseberry Bullet seem the best.

JAMAICA TIMBERS.

No of Specimen.	Name.	Weight per cubic foot. Pounds.	Crushing Stress. Tons per sq. inch.	Co-efficient of bending strength. Tons per sq. inch.	Shearing Stress. Tons per sq. inches.	Modulus of elasticity from bend- ing test. Tons
53	Mountain Mahoe	33.46	1.973	3.240	0.536	363.1
65	Blue Mountain Yacca	38.59	2.494	4.309	0.486	455.8
66	St. Ann's Yacca	44.67	2.524	5.252	0.346	596.4
67	" "	46.95	2.555	5.133	0.357	547.8
	Means	45.81	2.539	5.192	0.351	572.1
49	Spanish Elm	47.69	2.163	2.730	0.428	553.0
63	Seaside Mahoe	48.31	2.212	4.450	—	370.3
58	Hog Gum	50.21	2.915	5.141	0.462	728.6
50	Calabash	54.69	1.420	2.617	0.358	230.1
68	Yellow Sanders	57.29	4.025	4.509	0.368	720.9
35	Satin Wood	55.99	4.346	3.081	0.585	779.8
36	" "	61.15	4.287	6.627	0.305	775.0
	Means	58.57	4.316	4.854	0.445	777.4
54	Mammee Sapota	59.16	3.569	6.956	0.555	763.3
47	Bastard Cabbage	60.41	2.991	5.443	0.450	639.1
60	Prickly Yellow	60.66	1.777	2.706	0.418	499.4
39	Cashaw	61.26	3.760	6.437	0.851	874.0
55	Mammee	61.29	3.232	7.435	0.362	857.2
57	Mountain Guava	65.04	3.837	8.292	0.386	829.0
61	Wannika	65.34	2.773	2.932	0.485	695.3
62	Seaside Grape	65.34	2.517	4.135	0.428	637.4
56	Prune	66.23	3.433	6.850	0.739	919.6
48	Yoke Wood	70.48	2.097	3.040	0.317	286.4
52	Red or Cherry Bullet	71.26	3.566	6.122	0.503	958.4
64	Hog Meat	73.82	3.653	5.697	0.470	638.1
51	Naseberry Bullet	74.27	4.308	9.163	0.503	108.0
44	Rosewood	74.45	5.713	6.726	0.351	986.0
33	Lignum Vitæ	76.47	3.415	4.888	0.447	498.6
42	" "	74.86	4.328	3.048	1.246	503.5
	Means	75.66	3.871	3.968	0.846	503.6

PORTRAITS WANTED.

The Secretary would be glad to hear of Portraits of any of the following Jamaica Worthies which are for sale, or which would be lent for the purposes of reproduction :—

Aycough, John, President	...	...	1726
Barkly, Sir Henry, K.C.B., Governor	...	...	1853
Balcarres, Alexander, Earl of, Lieut.-Governor	...	...	1795
Barham, Henry, F.R.S., Author, d.	...	...	1726
Beckford, Peter, Lieut.-Governor	...	...	1702
Beckford, William, Author, d	...	...	1799
Belmore, Somerset Lowry, Earl of, Governor	...	...	1829
Beeston, Sir William, Kt., Governor	...	...	1700
Belisario, I. M., Artist	...	...	1837
Bell, E. Wells, Major-General, Lieut.-Governor	...	...	1856
Berkeley, Major-General, Lieut. Governor	...	...	1846
Bourden, John, President	...	...	1692
Brayne, General, William, Mlty. Comdt.	...	...	1656
Bridges, Rev. George Wilson, Author, (flourished about)	...	...	1837
Browne, Patrick, Author, d	...	...	1790
Campbell, A., Major-General, Governor	...	...	1783
Clark, Alfred, Brigadier-General, Lieut.-Governor	...	...	1784
Conram, Henry, Major-General, Lieut.-Governor	...	...	1821
Cunnningham, Henry, Governor	...	...	1735
Cuthbert George, President	...	...	1832
Dallas, Robert Charles, Author, d.	...	...	1824
Dalling John, Major-General	...	...	1778
D'Oyley, Edward, General, Governor	...	...	1661
Elletson, Roger Hope, Lt-Governor	...	...	1776
Gregory, John, President	...	...	1735
Grey, Sir Charles Edward, K.H., Governor	...	...	1846
Grey, Sir William, K.C.S.I., Governor	...	...	1874
Haldane, George, General, Governor	...	...	1759
Hamilton, Lord Archibald, Governor	...	...	1711
Handasyd, F., Colonel, Governor	...	...	1704
Heywood, Peter, Governor	...	...	1716
Hunter, R., Major-Genl., Governor	...	...	1735
Inchiquin, William, Earl of, Governor	...	...	1692
Keith, Sir Basil, Knt. Governor	...	...	1774
Lawes, Sir Nicholas, Knt. Governor	...	...	1718
Lunan, John, Author	...	...	1814
Lynch, Sir Thomas, Knt. Governor	...	...	1671
Lyttleton, William Henry, Governor	...	...	1762
Manchester, William, Duke of, Governor	...	...	1813
Modyford, Sir F., Bart, Governor	...	...	1664
Molesworth, Hender, Colonel, Lt.-Governor	...	...	1684
Morgan, Edward, Colonel, Lt.-Governor	...	...	1664
Morrison, Edward, Lt.-Governor	...	...	1811
Moore, Henry, Lt.-Governor	...	...	1759
Norcot, Sir Amos, Major-General, Governor	...	...	1834
Nugent, George, Lt. General, Lt-Governor	...	...	1801
Portland, Henry, Duke of, Governor	...	...	1722
Rushworth, Edward E., D.C.L., C.M.G., Lt.-Governor	...	...	1877
Scott, Michael, Author, d.	...	...	1835
Selwyn, William, Major-General, Governor	...	...	1702
Smith, Sir Lionel, Lt. General, Bart. K.C.B., Governor	...	...	1836
Stewart, John, Lt. Governor	...	...	1742
Trelawney, Edward, Governor	...	...	1738
Trelawney, Sir W., Bart., Governor	...	...	1768
Venables, General, (flourished about)	...	...	1655
Watson, Sir Francis, President	...	...	1688
White, John, President	...	...	1692
Williamson, A., Major-General, Lt. Governor	1791
Windsor, Lord, Governor	1662

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Museum—From 10 a.m. till dusk.

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Stock and stock raising in Jamaica	ARCHIBALD ROXBURGH	out of print.
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Classified Book-List: Agriculture 1893,		1d.*
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Biblioteca Jamaicensis; Some account of the principal works on Jamaica the Library of the Institute, 1895		6d.
Jamaica in 1896, A Handbook of information for intending settlers and others, 1896		6d.
Catalogue of the Books in the Library of the Institute, 1895		6s.†

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1. The Rainfall Atlas of Jamaica, By MAXWELL HALL, M.A. 1892	...	5s.†
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JAMAICA.

ANNUAL REPORT

ON THE

INSTITUTE OF JAMAICA,

FOR

THE YEAR ENDED 31ST MARCH, 1897.

Ordered by His Excellency the Governor to be Printed.



J A M A I C A :
GOVERNMENT PRINTING OFFICE, 79 DUKE STREET, KINGSTON,
1897.

ANNUAL REPORT

ON THE

INSTITUTE OF JAMAICA,

FOR THE YEAR ENDED 31st MARCH, 1897.



Institute of Jamaica, Kingston, June, 12th, 1897.

The Report is arranged under the following heads :--

I. ORGANIZATION.

- (i) Board of Governors.
- (ii) Committees.
- (iii) Executive Staff.
- (iv) Membership.
- (v) Building Accommodation.
- (vi) Hours of Opening.
- (vii) Finance.

II. LITERATURE.

- (viii) Library.
- (ix) Literature in country districts.
Mandeville Branch.
- (x) National Home Reading Union.

III. SCIENCE.

- (xi) Museum.
 - (a) Zoology.
 - (b) Botany.
 - (c) Geology.
 - (d) Anthropology.
 - (e) Imperial Institute Duplicate Collection.
 - (f) Cases.
 - (g) Contributions.
 - (h) Attendance.
 - (i) Live Exhibits.
- (xii) Biological Laboratory and Research.
- (xiii) Anthropological Research.
- (xiv) Economic Entomology.
- (xv) Notes, Articles and Lectures from the Museum.
- (xvi) Collecting Expeditions.
- (xvii) Assistance of Specialists.

IV. ART.

- (xviii) Art Classes.
- (xix) Art Gallery.

V. LITERATURE, SCIENCE AND ART.

- (xx) Members' Meetings.
- (xxi) Institute of Jamaica Lectures.
- (xxii) Journal of the Institute.
- (xxiii) Other Publications.
- (xxiv) Competitions in Literature, Science, Arts and Crafts.
- (xxv) Affiliation with other Societies.

APPENDICES.

Appendix A.—Statement of Receipts and Disbursements for the year ended 31st March, 1897, (i) Vote, (ii) Loan, (iii) Imperial Institute account (iv) Private Funds

Appendix B.—Record of Readers in the Library of the Institute for the year ended 31st March, 1897.

Appendix C.—Classified Return of the number of works issued (i) from the Library of the Institute during the year ended 31st March, 1897, compared with the return for the five previous years; (ii) from the Mandeville Branch for the year 1896-97.

Appendix D.—Works added to the Library 1896-97.

Appendix E.—Classification of Books in the Library of the Institute of Jamaica on the 31st of March, 1897.

Appendix F.—(i) Periodicals and Newspapers on the Tables of the Reading Room. (ii) Periodicals and Newspapers in the Reading Room of the Mandeville Branch.

Appendix G.—Additions to the Museum. List of Donors.

Appendix H.—Museum Notes contributed to the various newspapers of the Island.

Appendix I.—Return of the visitors in the Museum for the year ended March 31st, 1897, month by month, compared with those of the two previous years.

Appendix J.—Additions to the Art Gallery. (a) Jamaica Portrait Gallery. (b) Other additions.

Appendix K.—List of Institutions to which the Journal is sent.

R E P O R T.

I.—ORGANIZATION.

(i) *Board of Governors.*—During the year, no change has taken place in the personnel of the Board of Governors of the Institute.

(ii) *Committees.*—The following Committees of Members of the Board have been appointed and have met as occasion required during the year, “Library, Publishing and Lecture;” “Museum and Imperial Institute;” “Special Finance;” and “Competitions” Committees.

It will be seen that there have been 12 ordinary meetings, and 4 special meetings of the Board; 23 committee meetings, and 11 members meetings; making a total of 50 meetings held during the year.

BOARD.				COMMITTEES.					Members' Meetings.	Grand Total of Board Committee and Members' Meetings.
	Attendance at Ordinary Meetings.	Attendance at Special Meetings.	Total Attendance at Board Meetings.	Library Committee.	Museum Committee.	Special Finance Committee.	Competitions Committee.	Total Attendance at Committee Meetings.		
Meetings held	12	4	16	10	9	1	3	23	11	50
Hon. C. B. Mosse, M.D., C.B., C.M.G., Chairman of the Board, 1896-97	11	4	15	0	1	1	0	2	0	17
Hon. W. Fawcett, B. Sc. F.L.S.	8	1	9	1	5	.	0	6	0	15
J. W. Plaxton, Esq., M.R.C.S., Chairman Museum Committee	11	2	13	0	9	0	0	9	3	25
Rev. Wm. Simms, M.A. (1)	7	1	8	8	.	0	0	8	2	18
H. Vendryes, Esq.	3	1	4	.	2	.	.	2	3	9
Rev. Wm. Gilkes, Chairman Library Committee (2)	11	4	15	8	.	.	3	11	8	36
G. C. Henderson, Esq., M.D. (3)	4	2	6	.	2	.	.	2	2	10
W. H. Strachan, Esq., L.R.C.P.	12	4	16	2	4	.	2	8	8	32
Hon. S. C. Burke, F.G.S.	7	1	8	1	.	.	0	1	0	9
James Allwood, Esq.	5	3	8	3	.	1	0	4	0	12
Jasper Cargil, Esq., M.D.	11	2	13	.	0	.	.	0	0	13

- (1.) Was off the Island between 5th November and 15th December.
- (2.) " " " " " 14th July and 3rd September.
- (3.) " " " " " 1st April and 4th September.

(iii.) *Executive Staff*.—No change has been made in the personnel of the Executive Staff of the Institute.

(iv.) *Membership*.—During the year three corresponding members were elected: one subscribing member compounded and became a life-member; and 64 subscribing members were elected, making a total of 68 added during the year to the total of 332 with which the year commenced—or 400 in all. Deducting one corresponding member who died during the year, and the loss of 69 subscribing members, (3 by death and 66 by resignation) the roll now stands at 330.

During their visit to the island at their Marine Biological Laboratory at Port Henderson, the students of the Johns Hopkins University were made members of the Institute.

The following are the the corresponding members elected during the year, with the reasons for their election:—

Rev. W. W. Rumsey, in recognition of the interest displayed and the services rendered by him in archæological and anthropological researches.

Mr. P. L. Simmonds, the author of "Waste Products." "The Tropical Agriculturist," and numerous other works of economic value—on account of his services rendered to tropical agriculture.

Mr. F. C. Nicholas, on account of his interest manifested in Jamaica geology.

(v.) *Building Accommodation*.—The advantage of having a room freed from book-cases, reserved as a lecture hall without interfering with the public reading room has been fully felt, and the acquisition of a more suitable home for the museum has undoubtedly had a favourable influence upon the number of visitors to that branch of the institute. The increase in the number of readers in the public reading room alluded to further on, is causing the Board to consider the question of further alterations in the arrangement of the library.

(vi.) *Hours of Opening*.—With the removal of the library downstairs, it was found necessary to close the art gallery at 5 p.m. as it was thought undesirable to leave it open to the public without an attendant being in charge, the cost of which the Board finds itself unable to meet at present. The library and museum have been kept open, as usual; the former from 11 a.m. to 9 p.m., and the latter from 10 a.m. till dusk.

(vii.) *Finance*.—In Appendix A. is given a statement of the Receipts and Disbursements of the Institute during the 12 months.

II. LITERATURE.

(viii.) *Library*.—Visitors. Appendix B. gives the number of visitors to the Reading Room of the Library during the year, (39,573), which, when compared with that of last year (35,399) shows an increase of 4,174, or 11.7 per cent. The largest attendance on any one day occurred on Saturday, February 6th, when there were 193 readers. The smallest attendance was on Whit Monday, when there were 60. The month of March was the highest on record, and four months in the past year, (March, January, October and August) were higher than the highest month in any previous year. The Board trusts that when the contemplated alterations in the library are accomplished, affording increased accommodation in the reading room, the steady increase which it has been able to chronicle during the last six years will be maintained.

Works issued.—Appendix C. gives the number of works lent out during the year (6,343), which when compared with last year (6,150) shews an increase of 193.

There is a marked increase in the works of history, biography, and travels borrowed; a slight increase in art, science, and natural history; in poetry and in prose fiction; while there is a decrease in the periodicals.

This decrease is due, it is believed, to the fact that many of the 289 borrowers have found considerable difficulty in obtaining the periodicals which they wanted, when they wanted them. The only remedy would be the purchase of duplicate copies of such periodicals as are much read: but in view of the comparatively large amount already spent on periodicals, the Board feels that it is unable to do this for the present.

Additions to the Library.—As will be seen from Appendix D., 678 works have been added during the year, 520 by donation and 158 by purchase. The Board would here record its thanks to those who have kindly made donations to the library, and whose names are recorded in the appendix.

Miss Anna L. Ward, of Waterbury, Connecticut, U.S.A., a corresponding member of the Institute, has again rendered services to the library by acquiring for it rare West India and Jamaica works.

Lists of the works added have, from time to time, appeared in the "Gleaner" newspaper.

In Appendix E. will be found a return giving the number of volumes in the library under each head of the classification. The total number of volumes in the library is 10,202.

In Appendix F. is given a list of the periodicals and newspapers on the tables of the reading room. These are put into circulation amongst members so soon as new issues arrive.

(ix.) *Literature in Country Districts*.—The Board has, during the whole of the year given considerable attention to the question of the extension of the advantages of literature to the country parts of the island. It made its first offer of a Branch to Montego Bay. Negotiations were carried on and the Chairman of the Library Committee, and the Secretary of the Institute visited the town and concluded what they thought was a satisfactory arrangement for the formation and working of a Branch, but the Local Committee, which had been appointed at a public meeting held at Montego Bay, subsequently withdrew.

Mandeville Branch.—Later in the year, upon the application of certain gentlemen in Mandeville, it was decided to form a Branch in that Town. A Local Committee was appointed, consisting of the

Right Rev. Bishop Douet, D.D., Chairman, the Hon. J. P. Clarke, Custos of Manchester, the Hon. J. T. Palache, Member of the Legislative Council for Manchester, and Mr. L. A. Isaacs, with Mr. M. F. Johns as Honorary Secretary.

As the Board's chief object in founding branches is to encourage, by the multiplication of facilities, a love of reading in the community generally, rather than to enable a few comparatively well-to-do people to borrow books by becoming members, it was decided that a public reading room should be opened in addition to any arrangements that might be made for a supply of books to members in any country locality, and this was done in the case of Mandeville. It was fully realized, that possibly in the first instance, not many of the general public would patronize the reading room; but, judging from the experience gained in Kingston during the last six years, it would, after a time, it was believed, attract readers. At any rate the attempt is being made, and the Board is not disappointed at the result at present attained.

The Local Committee held its first meeting on Thursday, 6th August, 1896, and from that date, has met regularly once a month. The library and reading room were opened on Monday 2nd September, 1896, and since then have been opened to the public from 1 p.m. to 6 p.m. every day except on Sundays and public holidays. It is intended that from June 1st to October 31st, the hours of opening shall be from 2 to 7 p.m. The library has been supplied with a certain number of works of reference and has received on loan two sets of books of 100 each, the titles of which are included in booklists prepared for the use of members. The Board expended on the furniture and books of reference for this Branch the sum of £44 6s. 10d., and proposes to expend in the forthcoming year on the Branch a certain amount of money in addition to the receipts obtained from subscriptions, the amount of which is 10s. each. It is intended that as other Branches are formed the books shall be circulated amongst them in sets of 100 each, so that there shall be a continuous supply of wholesome literature disseminated throughout the island. The Branch now number forty-two members.

The number of visitors to the Mandeville public reading room from 2nd November to 31st March, is as follows :—

From 1 to 3.30 p.m.	...	654
From 3.30 to 6 p.m.	...	992
Total for 128 days		1,646

giving an average of nearly 13 a day.

In Appendix F is given a list of the periodicals sent to the Mandeville Branch, for use first on the reading room table, and then for loan to members.

Applications for the formation of branches have been received from the towns of Port Antonio, Morant Bay and Linstead, in addition to Port Maria—but owing to the reduction of the amount for the purpose of Library extension placed on the Estimates for 1897-98, the Board will be unable to do more than found the Branch at Port Maria, and maintain that at Mandeville.

(x.) *National Home Reading Union*.—As mentioned in the last Report, the Board formed itself into a Committee for the management of a Jamaica Branch of the National Home Reading Union. A Public Meeting was held in the Institute in order that publicity might be given to the movement. As a result of that meeting, Five Circles were formed comprising 59 members; in addition to 6 individual members and one Honorary member, or 66 members in all.

The Circle Leaders are, Rev. H. H. Kilburn, Rev. Wm. Gillies, Rev. Baron Hay, and Mrs. Lewis, in Kingston, and Rev. E. D. Tinling in St. Mary.

III.—SCIENCE.

(xi.) *Museum*.—During the year changes have been made in the systematic arrangement of the objects in the Museum. The lower floor is now devoted to the collections in Botany, Geology and Anthropology, and the upper floor to Zoology and the Imperial Institute duplicate collection. Progress has been made in the more efficient display and labelling of most of the material. The following are the principal advancements in each group:

(a.) *Zoology*.—Additions have been made to the species of Lizards represented. Many bird's nests have been mounted and displayed along with the specimens of birds. The latter have been re-labelled. All the fishes in alcohol and formalin have been mounted on glass, re-labelled, and several additions have been made. The Decapod Crustacea have been named and arranged on tablets. Many of the Echinodermata, Actinaria, and Corals have been provisionally named and displayed. A four to six per cent. solution of Formalin has been mostly employed as a preservative fluid and found to work very satisfactorily, though the colours of the objects are not retained for long in specimens exposed to strong light. For delicate objects, such as jellyfish and sea-anemones, it is found to be extremely serviceable, preserving perfectly the natural form and histology.

(b.) *Botany*.—Additions have been made to the Herbarium by the Hon. Wm. Fawcett, Director of Public Gardens and Plantations.

(c.) *Geology*.—An extensive students' collection of fossils has been purchased and arranged, in two cases with descriptive labels. The series illustrates by actual fossils and casts the typical forms of life met with throughout the geological formations. The mineralogical collection has been grouped so as to illustrate, in an elementary manner, the different branches of interest in the subject. Mr. F. C. Nicholas has presented an elementary series of fossils, with illustrative recent shells; these have been biologically arranged. Some of the specimens from the Survey Geological collections have been lent to Professor R. T. Bill of the American Geological Survey, who is at present engaged upon a study of the Geology of Jamaica, having already carried out two explorations.

(d.) *Anthropology*.—The interest evinced last year in the Indian remains of the island has been maintained. Mr. R. C. MacCormack has placed on loan an important collection of implements, pottery,

shells, &c., collected by him in Vere. Mr. A. Townsend has contributed interesting material from a Kitchen-midden at Cranbrook, St. Ann, and others have contributed in a less degree. Mr. F. C. Nicholas presented a collection of 54 American implements.

(e.) *Imperial Institute Duplicate Collection*.—Practically all the material in this collection has been re-arranged, and most of the exhibition tins enamelled and labelled. The paintings of Jamaica flowers and fruits have been fixed along the staircase leading to the upper floor.

(f.) *Cases*.—Four new table-cases have been constructed on the Institute premises. All the vertical cases have had their thick wooden shelves replaced by glass; four large store cases for holding duplicate material have been made to fit under exhibition cases; most of the other exhibition cases have been renovated.

(g.) *Contributions*.—The list of contributions has been published month by month in the local papers. The complete list of contributors for the year is given in Appendix G. Special mention may be made of Mr. F. C. Nicholas's contribution of a collection of Fossils and recent shells, and of American archæological specimens; also the presentation of thirteen species of Holothuroids and other marine objects, by the students of the Johns Hopkins University.

(h.) *Attendance*.—The attendance during the year of those signing the Visitors' book has been 7,895; an increase of over 29 per cent. on that of the previous year. An encouraging feature is the visit of teachers with their pupils from various schools. The returns, month by month, compared with those of the two previous years, are given in Appendix I.

(i.) *Live Exhibits*. A small Aviary and three Reptile cages have been erected in the grounds of the Institute, and are well stocked. Smaller cages, containing various live exhibits are distributed around, but more space and accommodation are needed. The live animals are much appreciated by visitors. The number of mammals, birds and reptiles at present maintained is 53. Special mention should be made of a live Indian coney, (*Capromys brachyurus*, Hill).

(xii.) *Biological Laboratory and Research*.—Research work, mainly upon the Actinaria of the island, has been continued in the Biological Laboratory of the Institute throughout the year. A Marine Laboratory was established at Port Royal for a fortnight, to enable investigations to be carried out on some of the members of the Marine Fauna of the Cays and Harbour. Much material was also collected for the Museum. Papers, dealing with the Zoology and Botany of the Island, have been published during the year in the Journal of the Institute.

A paper on the Jamaica Zoanthidæ, embracing a description of ten species, has been prepared by the Curator for publication; also one on the Actinian family Aliciidae describing, amongst others, a new Jamaica species of *Bunodeopsis*. A list, by Miss M. J. Rathbun, of the Smithsonian Institution, of 117 species of the Jamaica Decapod Crustacea has been received. During the summer months three students from the Johns Hopkins University, under the direction of Professor Brooks, established a temporary Marine Laboratory at Port Henderson. Contributions to Jamaican Zoology have been made by them; and many specimens were presented to the Museum.

(xiii.) *Anthropological Research*.—Investigations of Indian remains have been continued from last year, and more valuable material collected from the caves and refuse-heaps. The objects, however, do not differ greatly in type from those referred to in the last Report. An account of the results, illustrated with numerous figures, plates and a map, will shortly be published in the Journal of the Institute.

(xiv.) *Economic Entomology*.—Examples of various insect and other pests continue to be received: these are, as far as possible, identified, and remedies and suggestions are given. The identification of the Ticks, which at present have such an important bearing upon the Agriculture of the island, is being carried out.

(xv.) *Notes, Articles and Lectures from the Museum*.—Museum notes are now circulated to all the Newspapers of the island in the endeavour to stimulate an interest in the scientific work of the Institute. Special articles are also contributed from time to time. The List is given in Appendix H. Three popular Lectures have been delivered by the Curator in Kingston and elsewhere.

(xvi.) *Collecting Expeditions*.—Various collecting expeditions have been made from time to time by the Curator for the purpose of obtaining material.

(xvii.) *Assistance of Specialists*.—Specialists in various branches of science have rendered valuable assistance in the identification, &c., of specimens from the Museum. Professor A. C. Haddon is engaged upon the osteological material obtained from the Indian burial caves, and has already submitted a "Note upon the Craniology of the Jamaican Aborigines." He and Professor McMurrich have helped in the study of the "Actinaria." Miss M. J. Rathbun, of the Smithsonian Institution, "Jamaica Decapods." Professor Cockerell, New Mexico, "Scale Insects." Professor O. T. Mason, Smithsonian Institution, "Jamaican Aboriginal Remains." G. H. Carpenter, B.Sc., "Arachnida."

IV.—ART.

(xviii.) *Art Classes*.—The Board regrets that owing to its inability to find a suitable instructor, the Art Classes have been in abeyance during the past year.

(xix.) *Art Gallery*.—In Appendix J there is a list of portraits and other objects which have been added to the Jamaica Art Gallery.

In the Lecture Hall has been hung a series of engravings illustrative of the "History of Painting in England." A descriptive catalogue of these prints, with an appendix giving explanatory notes on the various forms of engraving employed, has been published in the "Gleaner" newspaper, and copies are placed in the room for the use of visitors.

The objects of Indian Art which were shown by Miss Donnelly in order to illustrate her paper on "The Industrial Arts of India," remained on exhibition, for a week after the lecture, in the art gallery,

V.- LITERATURE SCIENCE AND ART.

(xx.), *Members' Meetings*.—During the year ten members' meetings were held. The following papers were read :—

(36) "The Parasite of Malarial Fever," by Dr. W. H. Strachan, L.R.C.P.; (37) "Cilia," by Dr. J. H. Plaxton, M.R.C.S.; "Zoothidæ from Port Henderson," by J. E. Duerden, A.R.C.Sc. (Lond.); (38) "Chaetognaths or Arrow-worms," by Mr. F. S. Conant; Holothurians, or sea-cucumbers," by Mr. H. L. Clark; "Lucifer a genus of Crustacea," by Mr. Sadler; (39) "A brief sketch of the History of Painting in England," by the Secretary; (40) "Handel;" (41) "Mozart;" and (42) "Mendelssohn," by Miss Clara Myers; (43) "The Industrial Arts of India," by Miss Donnelly; (44) "Canterbury," by Mr. W. Cowper, M.A.; (45) "Birmingham," by Mr. J. C. Ford, ; and (46) "New York," by Mr. Q. O. Eckford, U. S. Consul: the first three of a series on "Celebrated Cities." The papers by Miss Myers on Handel, Mozart and Mendelssohn were the first ever read at the Institute on Music, and the large number of members and friends who were present proved that the subject has considerable interest in the island; albeit it was evident that many were induced to attend rather by a desire to hear the renderings of the masters' works than to listen to dissertations on their lives and geniuses. The Board also notes with gratification that the number of members attending the meetings generally is steadily increasing. The thanks of the Board are due to those who by reading papers have kindly aided them in their desire to spread a knowledge and love of literature, science and art in the community generally.

(xxi.) *Institute of Jamaica Lectures*.—In the early part of the year, the Curator, Mr. Duerden, completed his Lectures on "The Principles of Biology," which were attended by 131 students from the Training Colleges and schools, 8 members of the Institute, and 10 of the public.

(xxii.) *Journal of the Institute*.—During the year but one part of the Journal has been issued containing amongst others the following articles :—"Memoirs of William Wemyss Anderson;" the "Rev. W. J. Gardner;" the "Rev. James Watson" and "Richard Hill," Jamaica Worthies; Notes by the Editor on "A Map of Columbus's Fourth Voyage;" a sixth "Contributions to the History of the Port Royal Earthquake," by "A minister of the Parish of Vere." "A Sixteenth Century Charity," a brief history of the Mico Training College, Jamaica; by the Editor. "A memoir of Samuel Sharpe," by the Rev. James Balfour, M.A. "Contributions to the Fauna and Flora of Jamaica—(i) "Dragon flies," by George H. Carpenter, B. Sc., F.E.S.; (ii) "Lizards;" (iii) "Scorpions;" (iv) "Myriapods," by the Curator of the Museum; (v) "The Natural order Melastomaceæ," by the Hon. W. Fawcett, B.Sc., F.L.S. "Notes on the Life History of *Synapta vivipara*," by H. L. Clark. "Notes on the Marine Zoology of Kingston Harbour," by the Curator of the Museum. "The Manatee," by W. D. Neish, L.R.C.P., (Edin.) "Phases in Jamaica Natural History," by J. E. Duerden. "A Jamaica Drift Fruit," by J. E. Duerden. "Jamaica Timbers at the Imperial Institute," and "A curious instance of Artistic Plagiarism," by the Editor.

(xxiii.) *Other Publications*.—A revised edition of "Jamaica in 1895," called "Jamaica in 1896," was issued. The Secretary also prepared for the "Jamaica Handbook" for 1897, an article on "Jamaica Cartography" which was afterwards reprinted.

(xxiv.) *Competitions in Literature, Science, Arts and Crafts*.—In November, 1896, the Board considered a proposal from Messrs. Winkler & Co., that it should undertake to hold a Competition in Music somewhat similar to that which Messrs. Winkler had held in 1895. The Board appointed a committee to enquire into the matter and on its recommendation decided to hold "Competitions in Literature, Science, Arts and Crafts"—wider in scope than that suggested by Messrs. Winkler, and somewhat on the lines of the well-known Welsh Eisteddfod.

The task of organizing these competitions was remitted by the Board to a committee of its members; in order to render the scope of the competitions and the interest in the objects as wide as possible, the members of the committee, with the sanction of the Board, associated with themselves certain ladies and gentlemen, who were willing to assist in carrying out the work. They also invoked the aid of ladies and gentlemen as corresponding members of the committee to make the object of the competitions known throughout the various parishes of the Island.

The Board was unable to place at the disposal of the committee more than a very limited amount of money, part of which was intended to meet organizing expenses. The committee therefore was under the necessity of appealing for contributions towards the Prize Fund, and the number and amounts of the prizes offered were regulated to some extent, by the response to its appeal.

It was that the competitions should be so held as to form part of the celebration in Jamaica of the sixtieth anniversary of the Queen's accession, and that they should take the form of contests in Essay-writing and Poetry; in collecting and original research work in Natural History; in vocal and Instrumental Music; in Painting and Drawing; in Architecture; in the various Handicrafts practised in the Island; and lastly in subjects of educational interest.

The following is the Organizing Committee.

MEMBERS OF THE BOARD.

Hon. C. B. Mosse, C.B., O.M.G., Chairman of the Board.
Rev. W. Gillies, Chairman of the Committee.
W. H. Strachan, L.R.C.P., Vice-Chairman of the Committee.
Hon. W. Fawcett, B.Sc.
J. W. Plaxton, M.R.C.S.
Rev. Wm. Simms, M.A.
Hon. S. C. Burke, F.R.G.S.
J. Allwood,

ASSOCIATE MEMBERS.

Hon. T. Capper, B.A.
Astley G. Clark.
Rev. H. H. Kilburn.
W. Morrison, M.A.
L. Winkler.
Mrs. Capper
Mrs. Cundall.
Miss A. C. Johnson.
Mrs. H. J. Lewis.
Miss Clara Myers.

CORRESPONDING MEMBERS.

Parish.		Name.
Portland	...	Harry Cork.
		Mrs. Dewdney.
St. Thomas	...	Dr. C. R. Edwards.
		Mrs. Swainson,
St. Andrew	...	Mrs. York Moore.
St. Mary	...	Rev. J. H. Graham.
		Mrs. Pringle.
Clarendon	...	Mrs. Lionel Lee.
St. Ann	...	Mrs. Adam Roxburgh.
		Hon. and Rev. J. Johnston, M.D.
Manchester	...	Rt. Rev. Bishop Douet.
		Mrs. Wynne.
Hanover	...	B. S. C. Heaven.
Trelawny	...	Miss K. N. Fisher.
St. Elizabeth	...	Rev. H. E. Seiler.
Westmoreland	...	Rev. C. Henderson Davis.

(xxv.) *Affiliation with other Societies.*—In 1895 the Institute joined the Library Association of the United Kingdom. During 1896, it joined the Museums Association.

In conclusion the Board feels that the year just closed has been one of steady progress in all three branches of the Institute's work. The well sustained increase during the last six years in the numbers of readers in the reading room and of books borrowed, indicates a hopeful growth in interest in literature in the chief town of Jamaica, while the branch formed at Mandeville will it is trusted, prove the fore-runner of other similar institutions throughout the length and breath of the island. The increase in the number of visitors to the museum as well as the augmented correspondence of the Curator points to a growing interest in natural history; the papers which have been read on "Great Composers" by Miss Myers undoubtedly evoked an interest in the subject of music; and the pictures and other objects in the art gallery do as much in the cause of the graphic arts as the Board thinks it wise to attempt under present circumstances.

With enlarged facilities more might be done for the cause of Library Extension, which would the Board feels, prove an important factor in the educational advance of the people of the island.

CHAS. B. MOSSE, Chairman of the Board, 1896-97.

FRANK CUNDALL, Secretary of the Institute of Jamaica.

APPENDIX A.—INSTITUTE OF JAMAICA.

(i.) VOTE—Receipts and Disbursements for the year 1896-97.

1896-97—1st April.				1896-97.			
	£	s.	d.		£	s.	d.
By Balance from last year	...	7	19 8	To Salaries	...	1,020	0 0
" Grant	...	2,050	0 0	" Wages	...	261	13 6
				" Pension	...	21	0 0
							1,302 13 6
				SERVICES—			
				" Additions to Library	171	12	4½
				" Library Extension to Coun-			
				try Districts	...	117	11 9½
				" Additions to Museum and			
				Show Cases	...	120	19 8
				" Repayment to Loan New			
				Museum Building	...	70	0 0
				" Additions to Art Gallery...	...	23	5 8½
				" Lectures	...	5	6 6
				" Postages	...	39	12 10½
				" Lighting and Water Rates	...	66	19 1
				" Advertisements	...	25	0 0
				" Miscellaneous	...	116	10 8
" Balance	...	1	12 6				756 18 8
							£2,059 12 2
							£2,059 12 2

INSTITUTE OF JAMAICA.

(ii.) LOAN ACCOUNT.

1896-97.	£	s.	d.	1896-97.	£	s.	d.	£	s.	d.
To Loan from Government, 1895 ...	500	0	0	1896, By Cash paid 20 March	70	0	0			
				1897, " 23 March ...	70	0	0	140	0	0
				Balance due		...		360	0	0
	£500	0	0					£500	0	0

INSTITUTE OF JAMAICA.

(iii.) IMPERIAL INSTITUTE Account, 1896-97.

	£	s.	d.		£	s.	d.
To Balance from last year	7	9	9	By Transmitted C. W. Eves	226	17	0
" Grant	250	0	0	" Wages	23	2	0
				" Sundries	3	18	3
				" Balance	3	12	6
	£257	9	9		£257	9	9

INSTITUTE OF JAMAICA.

(iv.) PRIVATE FUNDS—Receipts and Disbursements for the year 1896-97.

	£	s.	d.		£	s.	d.
To Balance £103 15s. 4d. x £10 5s. 7½d.	114	0	11½	By Journal	67	10	9
" Sale of publications	13	12	0	" Art Gallery	2	12	6
" Subscriptions, 1896	95	5	0	" Library Assistant	37	0	0
" Do. 1897	90	0	0	" Jamaica in 1897	3	17	5
Lectures	16	12	0	" Lectures	30	16	7
" N. H. R. U. Subscriptions and Books	12	12	3	" Sundries	13	18	1½
" Competitions (Donations)...	30	3	1	" N. H. R. Union	14	0	6
" Petty Receipts	5	13	0	" Loan to Vote (see contra)	32	0	0
" Loan to Vote (see contra)...	32	0	0	" Balances—			
				Bank £192 7s. 11d. x In hand £15 14s. 6d.=	208	2	5
	£409	18	3½		£409	18	3½

APPENDIX B.

Record of Readers in the Library for the year ending 31st March, 1897, as compared with the five previous years.

Month.	1896-97.			1895-96.			1894-95.			1893-94.			1892-93.			1891-92.		
	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.
April	1,733	1,149	2,882	1,748	1,266	3,014	1,081	938	2,079	922	606	1,528	789	541	1,330	858	181	1,039
May	1,742	1,168	2,910	2,019	1,443	3,462	1,112	982	2,094	963	770	1,733	669	528	1,197	577	216	793
June	1,624	1,338	2,962	1,728	1,453	3,181	1,146	973	2,119	930	752	1,682	664	595	1,259	622	273	895
July	1,733	1,449	3,182	1,654	1,447	3,101	1,336	974	2,310	1,029	732	1,761	754	545	1,299	649	245	894
August	1,860	1,610	3,470	1,473	1,422	2,895	1,330	1,045	2,395	1,178	827	2,005	623	425	1,048	655	234	889
September	1,637	1,495	3,132	1,782	1,298	3,080	1,273	937	2,210	1,143	830	1,973	711	677	1,388	567	248	815
October	1,879	1,659	3,538	1,848	1,264	3,112	1,266	1,143	2,409	1,106	837	1,943	846	579	1,425	622	274	896
November	1,601	1,603	3,204	1,790	1,139	2,929	1,508	1,155	2,663	1,164	829	1,993	763	642	1,405	581	214	795
December	1,610	1,416	3,026	1,502	1,054	2,556	1,252	931	2,183	1,022	833	1,855	690	448	1,138	555	351	906
January	1,898	1,728	3,626	1,600	1,122	2,722	1,701	1,311	3,012	1,275	1,002	2,277	889	613	1,502	750	521	1,271
February	1,749	1,709	3,458	1,713	1,210	2,923	1,791	1,132	2,923	1,064	947	2,011	830	630	1,461	766	564	1,390
March ¹	2,022	2,111	4,133	1,498	926	*1,424	2,065	1,339	3,404	1,252	1,088	2,340	925	654	1,579	685	517	1,202
	21,138	18,435	39,573	20,355	15,044	35,399	16,861	12,940	29,801	13,048	10,053	23,101	9,153	6,877	16,030	7,887	3,838	11,725

* Closed for 5 afternoons and 3 whole days.

Totals		COMPARISON.	
1896-97	39,573	1896-97	39,573
1895-96	35,399	1895-96	35,399
1894-95	29,801	Increase	
1893-94	23,101		
1892-93	16,030		
1891-92	11,725	4,174 or 11½ per cent. over last year and 237 per cent over 1891-92.	

APPENDIX C.

Classified Return of the number of Works issued from the Library during the year ended 31st March, 1897, compared with the return for the five previous years.

Number of Borrowers.	1896-97.		1895-96.		1894-95.		1893-94.		1892-93.		1891-92.	
	289		272		288		237		229		173	
	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.
Theology, Philosophy, &c. ...	79	1.25	78	1.27	84	1.36	110	1.84	90	1.95	64	1.96
History, Biography, Travels, &c. ...	560	8.83	398	6.47	545	8.83	529	8.86	540	11.70	463	14.15
Law, Politics, Sociology, &c. ...	70	1.10	52	0.85	43	0.70	35	0.58	29	0.63	36	1.10
Art, Science, Natural History ...	310	4.89	276	4.49	269	4.36	340	5.69	186	4.03	219	6.69
Poetry and Drama ...	90	1.42	66	1.07	59	0.95	79	1.32	142	3.08	63	1.93
Prose Fiction ...	2,550	40.20	2,193	35.66	2,476	40.10	2,897	48.52	2,021	43.78	1,617	49.42
Miscellaneous ...	108	1.70	87	1.41	131	2.12	89	1.49	137	2.97	169	5.16
Periodicals ...	2,499	39.40	2,916	47.41	2,435	39.43	1,798	30.11	1,387	30.05	538	16.44
West India ...	77	1.21	84	1.37	133	2.15	94	1.59	84	1.81	103	3.15
	6,343	100.00	6,150	100.00	6,175	100.00	5,971	100.00	4,616	100.00	3,272	100.00

Comparison	...	1896-97	...	6,343
"	...	1895-96	...	6,150
		Increase	...	193

MANDEVILLE BRANCH.—Works Issued.

Number of Borrowers.	1896-97.	
	32	
	Books Borrowed.	Percentage.
Theology ...	1	0.30
History, Biography, Travels ...	27	8.80
Law, Politics, Sociology, &c. ...	—	—
Art, Science, Natural History ...	21	6.84
Poetry and Drama ...	6	1.96
Prose Fiction ...	95	30.95
Miscellaneous ...	11	3.59
Periodicals ...	146	47.56
West India ...	—	—
Total	307	100.00

APPENDIX D.

WORKS ADDED TO THE LIBRARY, 1896-97.

Bound Volumes presented.

	Vols.		Vols.		
British Museum	...	4	Royal Colonial Institute	...	1
Lords Commissioners of H. M.			Institute of Civil Engineers	...	1
Treasury	...	50	Miss Gayleard	...	4
U. S. Department of Education	...	4	Mrs. Lumb	...	14
O. Marescaux	...	1	F. A. Petgrave	...	2
Mrs. Oughton	...	1	Colin M. Gillespie	...	1
Colonial Secretary	...	23	Missouri Botanic Garden	...	2
His Excellency Sir H. A. Blake,			Smithsonian Institution	...	4
K.C.M.G.	...	1	H. McCrae	...	1
F. E. Jackson	...	1	Frank Cundall	...	18
J. C. Lewis	...	3	Hon. D. Davis, C.M.G.	...	1
Rev. Wm. Gillies	...	1	Jos. C. Ford	...	3
Public Library, Boston	...	1	Maurice Levy	...	3
Thomas Hendrick	...	1	W J. Walker	...	2
J. deCordova	...	1	C Washington Eves, C.M.G	...	3
Dr. G. J. Neish	...	3	National Home Reading Union	...	1
H. M. Cundall	...	1	F. S. Sanguinetti	...	5
F. W. Willis	...	1	E. Richardson	...	1
J. Cargill, M.D.	...	4	L. Alexander	...	4
Public Library, Trinidad	...	1	H. D. Sedgwick	...	1
Bishop Tugwell	...	4			
Public Library, Grenada	...	1			179

Pamphlets, Maps, &c., presented.

Volta Bureau	...	1	Australian Association	...	1
Rev. J. B. Ellis, M.A.	...	1	L. Hutchings	...	1
New York State Museum	...	1	Royal Society, New South Wales	...	1
R. G. Haliburton	...	1	T. H. McDermot	...	1
Miss A. L. Ward	...	1	Leslie Alexander	...	4
The Colonial Secretary	...	205	George Levy	...	9
M. Bravo	...	2	E. M. Earle	...	1
Geelong Chamber of Commerce	...	1	Illinois State Museum	...	1
American Philosophical Society	...	1	J. Gall	...	7
Hatch Experiment Station	...	2	Rev. F. S. Messias	...	2
U. S. Department of Agriculture	...	8	Nova Scotia Institute	...	1
Geological Society, Sweden	...	22	National Museum, Buenos Ayres	...	1
Royal Dublin Society	...	11	Smithsonian Institution	...	2
Superintending Inspector of Schools	...	2	J. C. Ford	...	1
Canadian Government	...	2	T. Hendrick	...	1
Agricultural Society, British Guiana	...	1	Educational Supply Association	...	8
Natural History Society, Modena	...	2	Dr. C. R. Edwards	...	1
New Zealand Institute	...	1	J. E. Duerden	...	10
Rev. Wm. Pratt, M.A.	...	2	Frank Cundall	...	5
Hon. W. Fawcett, B. Sc.	...	15			
A. W. Gardner	...	1			341

SUMMARY.

Bound volumes presented	...	179
Pamphlets	...	341
Volumes purchased	...	156
Pamphlets	...	2
Total	...	678

APPENDIX E.

CLASSIFICATION OF VOLUMES IN THE LIBRARY OF THE INSTITUTE OF JAMAICA ON THE 31ST MARCH, 1897-

Ia. Jamaica	...	850	Vb. Science and National History	1,317
Ib. West Indies	...	551	VI. Poetry and the Drama	... 294
Ic. West Africa	...	13	VII. Linguistics and Philology	85
IIa. Theology	...	289	VIII. Prose Fiction	... 1,291
IIb. Philosophy	...	219	IX. Miscellaneous	... 599
IIIa. History	...	1,396	X. Dictionaries and Works of Re-	
IIIb. Biography	...	1,019	ference	... 396
IIIc. Travels	...	588	XI. Reports of Societies	... 444
IVa. Law, Politics, Sociology	...	395		
IVb. Education	...	272		10,202
Va. Art	...	184		

APPENDIX F.

Periodicals and Newspapers on the Tables of the Reading Room.

Agricultural Gazette, New South Wales	Jamaica Post
Agricultural Journal, Cape Colony	Jamaica Weather Report
Annals and Magazine of Natural History	Johns Hopkins University Circulars
Army List	Journal of the Board of Agriculture
Art Amateur	Journal of the Institute of Jamaica
Art Journal	Journal of the Jamaica Agricultural Society
Athenæum	Journal of the Microscopical Society
Blackwood's Magazine	Journal of the Trinidad Field Naturalists Club
Book News	Kew Bulletin
British Trade Journal	Leisure Hour
Budget (Jamaica)	Library
Builder	Literary World
Bulletin of the Botanical Department (Jamaica)	Macmillan's Magazine
Bulletin of the Torrey Botanical Club	Magazine of Art
Cassell's Saturday Magazine	Musical Herald
Catholic Opinion (Jamaica)	Natural Science
Century Magazine	Nature
Chamber of Commerce Journal	Navy List
Chambers' Journal	New York Herald
Colonies and India	Nineteenth Century
Commerce	Nineteenth Century (Jamaica)
Contemporary Review	North American Review
Cornwall Herald (Jamaica)	Odd Fellow's Magazine
Cornwall Times (Jamaica)	Presbyterian, (Jamaica)
Edinburgh Review	Proceedings of the Zoological Society
Engineering	Public Opinion
English Illustrated Magazine	Publisher's Circular
English Mechanic	Punch
European Mail	Queen
Field	Review of Reviews
Fortnightly Review	Revue des deux Mondes
Gall's News Letter (Jamaica)	Saturday Review
Gardener's Chronicle	Scientific American
Gardner's Monthly (Jamaica)	“ “ Supplement and Building Edition
Gentlewoman, The	Scribner's Magazine
Geographical Journal	Spectator
Graphic	Strand Magazine
Gleaner, (Jamaica)	Sugar Cane
Harper's Magazine	Timehri (British Guiana)
Home Art Work	Times (London) Daily
Illustrated London News	Times (“) Weekly
Jamaica Advocate	Tropical Agriculturist
Jamaica Baptist Reporter	West Indian and Commercial Advertiser
Jamaica Churchman	Winkler's Musical Monthly (Jamaica)
Jamaica Gazette	

MANDEVILLE BRANCH OF THE LIBRARY OF THE INSTITUTE OF JAMAICA.

Magazines and Newspapers in the Reading Room.

Budget, (Jamaica)	Jamaica Weather Report
Bulletin of the Botanical Department (Jamaica)	Journal of the Institute of Jamaica
Cassell's Saturday Magazine	Leisure Hour
Chambers's Journal	Magazine of Art
Contemporary Review	News Letter (Jamaica)
Gardner's Monthly (Jamaica)	Nineteenth Century
Gleaner (Jamaica)	Presbyterian (Jamaica)
Graphic	Public Opinion
Harper's Magazine	Punch
Illustrated London News	Review of Reviews
Jamaica Baptist Reporter	Strand Magazine
Jamaica Churchman	Times Weekly (London)
Jamaica Gazette (Official)	Tropical Agriculturist
Jamaica Post	Winkler's Musical Monthly (Jamaica)

APPENDIX G.

Additions to the Museum.

LIST OF DONORS.

Armstrong, Miss	...	Collections of Insects, &c.
Bailey, W.	...	Potoo, <i>Pseudoscops grammicus</i> .
Pancroft, A.	...	Collections of Opals and Agates
Baxter, Captain	...	Ticks from Columbian and Jamaica cattle. Scorpions.

Braham, W. B.	...	Moth, <i>Chærocampa chiron</i> ; Praying Mantis, <i>Dendromantis phryganoides</i> . Spiders, Lizards, &c.
Brennan, J. F.	...	Stone implements; Photographs of Rock-carvings; Stalactites.
Campbell, J.	...	Boring Beetle, <i>Apate Muricata</i> ; Beetle, <i>Elateropsis Lineata</i> , &c.
Campbell, E. A. G.	...	Butterfly, <i>Deilephila</i> ; Centipede; Spotted-chinned snake.
Cargill, Dr.	...	Cranial bones of Galliwasp; Beetles; Scorpions, &c.
Carpenter, Dr.	...	Octopus; Longicorn Beetle; Spotted-chinned snakes.
Chapman, C. H.	...	Two-headed snake, <i>Typhlops lumbicalis</i> ; Tarantula, &c.
Clark, H. L.	...	Collection of Holothuroidea; Jelly-fish, &c.
Coles, Rev. C. H.	...	Insects.
Conant, F. S.	...	<i>Saagitta tenius</i> , <i>S. fleaccida</i> ; Medusa, &c.
Cradwick, Mrs.	...	Live Pond Turtle. Live Rats.
Cradwick, W.	...	Insects, Caterpillars, &c.
Cundall, Mrs.	...	Spider, Spotted-chinned snakes; Wood Slave, &c.
Cundall, F.	...	Remains from Colbeck Castle, &c.
Curator, The	...	Collections of Actiniaria; coral-forming polyps; Hydrocorallinæ; Echinoderms; Molluses; Crustacea, &c.
Davidson, K. & L.	...	Lizards, <i>Sphaerodactylus richardsonii</i> and <i>Sozyrhinus</i> ; Spiders; Worms; Beetles, &c.
Dean, H. P.	...	Caterpillars; Beetles; Milk White Rubber.
Dill, W. A. J.	...	Humming Bird and collection of Butterflies and Moths; Mace and Nutmeg.
Domville, R. J. Taylor	...	Pair of live Mountain Witches. Three Partridges.
Douet, G. A.	...	Texan Ticks.
Duff, A. S.	...	Incrustation of Sulphur; Saw Beetle, &c.
Eden, A. W. A.	...	Beetle.
Fawcett, Hon. W.	...	<i>Scolia atrata</i> ; Chicken Hawk, <i>Buteo borealis</i> ; 22 mounted plants &c.
Foster, E.	...	Collection of Shells, Implements; Two-headed snake.
Gall, J.	...	Scale Insects, <i>Lecanium hemisphaericum</i> and <i>Mytilaspis citricolor</i> . Collection of snakes, lizards, scorpions, centipedes, frogs, fish, insects.
George, A.	...	Black crab; spider, stick-insect.
Gibb, Dr.	...	Ticks.
Goodlet, J.	...	Tree Frog; Scorpions, Caterpillars.
Goodwin, R. N.	...	Broken stone implements; Cast of Fossil.
Grabham, Dr.	...	Bot larvæ; Fly with fungoid growth; Croaking Lizard.
Grey, Miss	...	Mealing Stones, Bones, &c.
Hall, C.	...	Crab, Fish, Wood Slave, &c.
Hanna, Bishop	...	Upper part of Mealing Stone.
Harris, W.	...	Firefly and Larvæ; Crabs, Beetles, Moth, &c.
Hart, A. J.	...	Collection of Insects, &c.
Henderson, Dr. G. C.	...	Stone celt on loan; Ticks; Larvæ of <i>Æstrus</i> .
Hutchings, L.	...	Skull; larva; Bitoite mica; Bats.
James, Inspector	...	Live Hawk.
Jarvis, P. W.	...	Collection of Bats.
King, A. O'Reilly	...	Collection of Shells, Bones, Indian Pottery from Weireka.
Kirkland, W.	...	Scorpion, Spotted-chinned Snakes.
Levy, A. DaCosta	...	Live Crocodile.
Livingston, R.	...	<i>Clypeaster</i> . Birds' Skins.
Lofthouse, Mrs.	...	<i>Brissus</i> .
Lyon, G. R.	...	Scorpion and Earwig; Butterfly; <i>Laurona eroglis</i> .
Lyon, G.	...	Sea horse; Flyi g-fish.
MacCormack, R. C.	...	<i>Teredo</i> ; Collection of Indian Implements; Pottery, Bones, &c. On loan.
MacGlashan, A. H.	...	Beetle; Scorpions; Rats; Cow-itch, &c.
Malabre, L.	...	Three Loggerhead Turtle, and one Green Turtle skulls. Spiny Crab.
Malabre, Dr. P. O.	...	<i>Nyctalemon ægistus</i> ; Spider.
Marescaux, O.	...	Beetles.
Maunsell, Dr.	...	Ticks.
Maxwell, H.	...	Cedar Bird.
Montagnac, C. R. O'Reilly	...	Two Indian Marble Amulets.
Mosse, Hon. Dr.	...	Moths, <i>Rustica cingulata</i> ; <i>Cocylus antæus</i> ; <i>Thysania zenobia</i> ; Double Orange.
Myers, Miss Clara	...	Bead Apron, made by Kaffir chief.
Neish, Dr. G. J.	...	Collection of Implements, &c.
Neish, Dr. W. D.	...	Scorpions; Two-headed Snakes, <i>Typhlops lumbicalis</i> ; Indian stone implements.
Nicholas, F. C.	...	Students' Fossil Type Collection; Collection of American Flint Arrowheads; Collection of American Indian Stone and Flint Implements.
Nunes, C. A.	...	Nest of the <i>Phanæus betzebul</i> : Beetle.

Nuttall, Miss	...	Nest of Insect Larvae.
Orrett, E. G.	...	Spotted chinned Snake.
Owen, J.	...	Insects.
Parsons, G.	...	Scorpions; Beetle.
Pinnock, Col. A. H.	...	Caterpillar of Hawk Moth; Lizard Eggs, &c.
Plant, W. H.	...	Two-headed Snake, <i>Typlops lumbricalis</i> .
Plaxton, Dr.	...	Cylindrical Brecciated conglomerate; Scorpion; Frogs; Ticks, &c.
Plummer, O.	...	Spotted-chinned Snake.
Redwood, C. N. B.	...	Barbary Doves.
Rumsey, Rev. W. W.	...	Collection of aboriginal Bones, Shell-beads, Implements, &c.
Salmon, E. L.	...	Fungi, &c.
Sanguinetti, E. H.	...	<i>Diaspis lanatus</i> ; Beetles, Scale insects, &c.
Savariau, Miss	...	Firefly; <i>Alans oculatus</i> ; Insects, &c.
Scotland, J. R.	...	Aquatic Insects; Lizard; Spiders; Jelly-fish; Insect with fungoid growth.
Strachan, Dr.	...	Earwig, <i>Forficesila Americana</i> ; Dragon fly, &c.
Students, Johns Hopkins University	...	<i>Scyllarus æquinoctialis</i> &c.
Sturridge, F. B.	...	Tarantula; Vegetable Hair; Collection of Fossils; Earth Balls.
Sudler, M. T.	...	<i>Lucifer typus</i> , &c
Swainson. Mrs.	...	Aquatic Worms: Scale Insects; Mounted Beetles; Two Land Planarians; Crabs; Chrysalis of Insects; Collection of Spiders; Live Potoo, &c.
Townend, A.	...	Moth of Pimento Borer; Collection of Bones; Indian Pattery and shells; Insects
Turton, Dr.	...	Aboriginal Stone Celt
Verley, Leo. E.	...	Indusial Limestone; live iguana; live Crocodiles; Birds.
Walters, Miss	...	Catterpillar attacked by Parasitic Fly.
Wilson, R.	...	Eggs of Nurse Fish; Two horned Devil Fish: Sting Ray.

Donations have also been received from the following:—

Abrahams, C.	Dias, W.	Isaacs, F. N.
Anderson, Dr. I. W.	Dodd, W.	Johnson, H.
Anderson, J. P.	Dougall, W.	Johnson, Miss
Austin, Mrs.	Dudley, H.	Jones, C. H. N.
Barram, E. A.	Duff, G.	Josephs, Miss
Beckford, S.	Dumont, L. G.	Joseph, H.
Beecham, B. C.	Dunn, C. E.	LeFranc, C. H.
Bell, H.	Dunn, E. F.	Levy, E.
Belton, C.	Duquesnay, L.	Levy, E. H.
Benjamin, A. M.	Edwards, M. H.	Lewin, W. M.
Benjamin, H.	Edwards, Dr.	Lopp, Rev. G.
Bennett, W.	Ellis, E. E.	McCartney, W. H.
Bonitto, K. V.	Farquharson, J. M.	McCrae, J. E.
Brady, E. A.	Feurtado, O.	McDermot, J. H.
Browne, A.	Finderson, E.	McDermot, H. H.
Brown, Miss Hilda	Fogarty, J.	McIntosh, A.
Bryan, J.	Fonseca, E. E.	McMoline, J.
Burton, Captain	Ford, H.	Mais, A. J.
Calder, H. H.	Fowler, A. H.	Mais, J. H. B.
Campbell, C.	Francis, J.	Marshall, F.
Campbell, E.	Gadpaille, J. E.	Martinez, J.
Campbell, J.	Gardner, H.	Martin, A. T. L.
Carter, W.	Gordon, J.	Mason, J.
Chandler, Rev. J. F. H.	Gordon, R.	Maxwall, W. L.
Charley, W.	Gossett, B. S.	Melville, Rev. A. R.
Clark, E.	Green, G.	Miller, S. A.
Clark, D. S.	Grey, B.	Miller, W.
Clarke, W.	Grossett, L. B.	Morphy, Mrs.
Condell, C. H.	Gunter, G. C.	Nairn, J.
Cooper, J.	Gunter, G. M.	Nunes, R. R.
Cowan, J.	Hall, W. G.	O'Brien, J.
Cox, Ivanhoe.	Hall, Mrs.	O'Mealy, A. A.
Cruce, A.	Harris, A.	Philips, A.
Dadd, C.	Harrison, L.	Pickwick, W. S.
Davis, F. W.	Henderson, W. A.	Pierce, W.
Davis, H.	Henriques, Mrs. T.	Pilliner, G. B.
deMontagnae, Ivan	Henriques, G.	Plaxton, Mrs.
Delgado, O. L.	Henry, E. H.	Poole, C. F.
Demetrius, J. W.	Hill, W. A.	Ray, H.
Denniston, W.	Hogg, G. A.	Roe, Mrs.
DeSouza, F.	Irving, I.	Romney, J. M.

Rouse, J.
 Sanftleben, D.
 Savage, H. L.
 Sharp, T. H.
 Sheridan, J. N.
 Shirley, J. L.
 Simon, R.
 Simpson, J. M.
 Smith, G.
 Smith, J. A.

Soutar, E.
 Stephens, J.
 Stevenson, L.
 Sullivan, A.
 Sullivan, Mrs.
 Sutherland, T.
 Sutton, L.
 Taylor, A.
 Taylor, G.
 Thompson, H.

Thompson, W. J.
 Tillman, Dr.
 Vendryes, H.
 Walton, C.
 Wareham, L.
 Waters, J.
 Whitehorne, R. H.
 Whittingham, J. W.
 Williams, Miss
 Wilson, J. A.

APPENDIX H.

MUSEUM NOTES.

Contributed to the various newspapers of the Island.

The Mole Cricket, April 29th, 1896.
 Discovery of Rock Carving in St. Mary, May 2nd, 1896.
 Carib Pottery in St. Kitts, June 3rd, 1896.
 The Bot Parasite, June, 2nd. 1896.
 Jamaica Spiders and Dragonflies, June 11th, 1896.
 Marine Laboratory of the Johns Hopkins at University Port Henderson, June 12th, 1896.
 Phases in Jamaica Natural History, June, 13th, 1896.
 The Geographical Evolution of Jamaica, June 24th, 1896.
 The Crab-clawed Scorpion, June 26th, 1896.
 Addition of a rare lizard to the Museum collections, June, 27th, 1896.
 Parthenogenesis of Scorpions, July 6th, 1896.
 The Crocodile " " "
 The Lizards of Jamaica, July 18th, 1896.
 Exhibition of a live Iguana, July 25th, 1896.
 Jamaican Anthropology, August 14th, 1896.
 Exhibition of a live Black Snake, August 14th, 1896.
 A new wax-producing scale insect, September 11th, 1896.
 The Parthenogenesis of the scorpion, September 12th, 1896.
 Birth of two Agoutis in the Institute Grounds, September 16th, 1896.
 Recent discoveries of Aboriginal Indian Remains in caves in Jamaica.
 The Plague of Caterpillars, October 24th, 1896.
 A Giant Fossil " " "
 The Pond or Marsh Turtles of Jamaica, October 30th, 1896.
 Dancing Beans, November 14th, 1896.
 Aboriginal Remains in St. Elizabeth, December 24th, 1896.
 A Branch cutting Beetle, December 10th, 1896.
 Discovery of a species of Sea-anemone, *Palythoa mammosa*, Ell. and Sol. ; First collected by Sir Hans Sloane, December 12th, 1896.
 Prevalence of the Spotted-chinned snake around Kingston, December 18th, 1896.
 Addition to the Aviary of a pair of Mountain Witches, or Blue Doves, January 6th, 1897.
 List of Birds of Jamaica, January 14th, 1897.
 The Grub Pest in Jamaica " 9th "
 Live Birds at the Museum " 13th "
 The food of the Aboriginal Indians, February 13th, 1897.

APPENDIX I.

Return of the visitors in the Museum for the year ended March 31st, 1897, month by month compared with those of the two previous years.

		1896-97.	1895-96.	1894-95.
April	...	591	410	487
May	...	568	592	325
June	...	575	332	344
July	...	758	376	236
August	...	706	531	295
September	...	785	654	390
October	...	897	364	456
November	...	591	593	341
December	...	275	501	218
January	...	690	615	452
February	...	728	538	340
March	...	731	589	857
		<hr/>	<hr/>	<hr/>
		7,895	6,104	4,740
		6,104	4,740	
		<hr/>	<hr/>	<hr/>
Increase	...	1,791 = 29 per cent.	1,364 = 28 per cent.	

APPENDIX J.

*Additions to the Art Gallery.**(a.) Jamaica Portrait Gallery.*

74. Lieutenant-General William Anne Villetes, Lieutenant Governor of Jamaica, b. 1754 d. 1808.
 75. Dr. Richard Robert Madden, writer, stipendiary magistrate in Jamaica, b. 1798 d. 1886.
 76. Rev. James Watson, Scotch Missionary, b. 1799 d. 1873.
 77. Major General Luke Smythe O'Connor, commander of the troops in Jamaica, b. 1806 d. 1873.
 78. Lord Rodney. Photographic reproduction of the painting by R. E. Pine in the Town-hall, Kingston.
 79. Admiral Sir Chaloner Ogle, b. 1681 d. 1750.
 80. Admiral Lord Nelson, b. 1758 d. 1805.

*(b.) Other Additions**Engravings.*

A series of 48 Engravings illustrative of the History of Painting in England.

Painter.		Painting.		Engraver.		Process.
1. Hans Holbein	...	Portrait of Charles de Solier, Seigneur de Morette	...	Fr. Hanfstängl	...	(Lithograph.)
2. " "	...	The Meyer Madonna	...	"	...	(")
3. Sir Anthony van Dyck	..	The Children of Charles I	...	"	...	(")
4. " "	.	Portrait of Charles I	...	Sir Robert Strange	..	(Engraving.)
5. Sir Peter Lely	...	Portrait of Mrs. Myddelton	..	Jas. McArdeell	...	(Mezzotint.)
6. Sir Godfrey Kneller	...	Portrait of Sir Isaac Newton	...	Thos. O. Barlow	...	(Engraving.)
7. William Hogarth	...	The March to Finchley	...	Luke Sullivan	...	(")
8. Richard Wilson, R. A. and John Hamilton Mortimer, A. R. A.	...	Meleager and the Calydonian Boar	..	W. Wollett & B. Pouncy		(")
9. Sir Joshua Reynolds, P. R. A.		Portrait of Lady Townshend	...	Chas. Tomkins	...	(Mezzotint.)
10. " " "	...	Angels' Heads	...	James Scott	...	(Engr. in stipple.)
11. " " "	...	Simplicity	...	Samuel Cozens	...	(Mezzotint.)
12. " " "	...	The Age of Innocence	...	" "	...	(")
13. Thos. Gainsborough, R. A.	..	The Blue Boy	...	Robert Graves	...	(Engraving.)
14. " "	...	The Watering Place	...	Wm. Miller	...	(")
15. " "	...	The Market Cart	...	E. Goodall	...	(")
16. George Romney	...	Portrait of Lady Hamilton	...	H. J. Greenhead	...	(Mezzotint.)
17. John Singleton Copley, R. A.		The death of Major Pierson	...	A. Kessler	...	(Engraving.)
18. Benjamin West, P. R. A.	...	Cromwell dissolving the Long Parliament		I. Hall	...	(")
19. " "	...	The Death of Nelson	...	James Heath	...	(")
20. Thomas Stothard	...	The Canterbury Pilgrims	...	Lewis Schiavonetti and James Heath		(Engraving.)
21. John Hoppner, R. A.	...	Portrait of the Duke of York	...	E. Hodges	...	(Mezzotint.)
22. George Morland	...	Birdnesting	...	T. G. Appleton	...	(")
23. Sir Thomas Lawrence, P. R. A.		Portrait of Lady Grosvenor	...	H. T. Greenhead	...	(")
24. " "	..	Portrait of George III.	..	William Finden	...	(Engraving.)
25. Joseph Mallord William Turner, R. A.	...	Lucerne	..	Robert Wallis	...	(")
26. " " "	...	Zurich	...	T. A. Prior	...	(")
27. " " "	...	Approach to Venice looking towards Fusina		Robert Wallis	...	(")

Painter.	Painting.	Engraver.	Process.
28. John Constable, R.A. ...	The Valley Farm ...	George Sanders ...	(Mezzotint.)
29. Sir David Wilkie, R.A. ---	Blindman's Buff ...	Abm. Raimbach ...	(Engraving.)
30. William Mulready, R.A. ...	Choosing the Wedding Gown ...	—	(Mezzotint.)
31. Sir George Hayter ...	Portrait of Queen Victoria ...	H. T. Ryall ...	(Engraving.)
32. John Linnell ...	Landscape ...	S. Myers ...	(Etching.)
33. “ “ ...	Landscape ...	“ ...	(“)
34. Richard Parkes Bonington ...	1. Charles V. visiting Francis I. after the battle of Pavia	J. D. Harding ...	(Lithograph.)
	2. A Sea View ...	“ “ ...	(“)
	3. River Scene ...	“ “ ...	(“)
	4. The Lute ...	C. Rolls ...	(Engraving.)
	5. Pont Royale, Paris ...	J. D. Harding ...	(Lithograph.)
	6. Coast of Normandy ...	“ “ ...	(“)
	7. Verona with the Palace of Prince Maffei	W. J. Cooke, jnr. ...	(Engraving.)
35. Sir Edwin Henry Landseer	The Monarch of the Glen ...	G. Zobel ...	(“)
36. Daniel Maclise, R.A. ...	Caxton shewing his Printing Press to Edward IV.	Fredk. Bromley ...	(“)
37. Gabriel Chas. Dante Rossetti	The Annunciation ...	C. Gaujeau ..	(Etching.)
38. Geo. Hemming Mason, A.R.A.	The End of the Day ...	R. W. Macbeth, A.R.A. ...	(“)
39. Frank Holl, R.A. ...	Portrait of the Duke of Cambridge	C. J. Tomkins ...	(Engraving.)
40. Lord Leighton, P.R.A; ...	The Daphnephoria ...	—	(Photogravure.)
41. “ “ ...	Frigidarium ...	—	(“)
42. Sir John Everett Millais, Burt., P.R.A. ...	Ophelia ...	Jas. Stephenson ...	(Engraving.)
43. John Pettie, R.A. ...	Highland Chief ...	John T. Lucas ...	(Etching.)
44. Frederick Walker, A.R.A. ...	The Vagrants ...	Chas. Waltner ...	(“)
45. George F. Watts, R.A. ...	Portrait of Tennyson ...	J. Stephenson ...	(Engraving.)
46. William Holman Hunt ...	The Shadow of Death ...	F. Stacpoole ...	(“)
47. Sir Edward Burne Jones, Bart. ...	Flamma Vestalis ...	C. Gaujeau ...	(Etching.)
48. J. A. McNeil Whistler ...	Portrait of the Painter's Mother ...	Richd. Josey ...	(Mezzotint.)

2. *Four Views of Jamaica.* Line Engravings. [No Painter's and no Engraver's name given.] London, 1779.

- (I.) “A Prospect of Ora Cabeca in the Parish of St. Maries the North Side of Jamaica taken from the Road leading to St. Anns, 1766. To the Honble. Zachary Bailey, Esq., this Plate is with all due respect inscribed.”
- (II.) “A View looking south of the Town and Harbour of Lucea in the Parish of Hanover the North side of Jamaica. To John Ellis, Esq., this Plate is with all due respect inscribed,”
- (III.) “A View of the Town and Harbour of Montego Bay in the Parish of St. James's, Jamaica, taken from the Road leading to St. Anns. To the Hon. John Palmer, this Plate is humbly inscribed.”
- (IV) “A Prospect of Port Antonio and Town of Titchfield in the Parish of Portland, on the North side, Jamaica, taken from Navy Island. To Henry Dawkins, Esq., this Plate is humbly inscribed.”

3. *Model of a Cannon.* Carved at the time from a piece of the timbers of the “Royal George” which sank at Spithead on the 29th of August, 1782. [Presented by E. E. Prichard, Esq.]

4. Stamps.

- (i.) Current Jamaica Postage and Telegraph Stamp. [Presented by the Postmaster of Jamaica.]
- (ii.) Set of the Embossed Duty Stamps of Jamaica from 1d. to £100. (50 in all.) [Presented by the Commissioner of Stamps.]
- (iii.) Jamaica 3d. stamp. [Presented by Mrs. Swainson.]

5. Coins, &c.

- $1\frac{1}{2}$ d. pieces. (Presented by J. Derbyshire, Esq.)
 $1\frac{1}{2}$ d. copper token (Jamaica.) [Presented by Mr. Fennik.]
 3 copper coins (unidentified.) [Presented by Mr. Fennik.]
 Gill Ticket. [Presented by Miss McCrae.]
 $\frac{1}{4}$ dollar anchor piece. [Presented by F. Correoso, Esq.]
 Impressed Spanish coin (G. R.) [Presented by Geo. Mould, Esq.]
 Spanish dollar
 " " G. R.
 Bank Token
 $\frac{1}{16}$ and $\frac{1}{8}$ dollar "Anchor Pieces"
 4 Haitian Coins
 1/ William III.
 3d. George I.
 Hammered Bit and seven other Spanish coins.
 Trinidad, 2d. 1838
 Danish West Indies, 10 cents, 1878
 French Colonies, 50 cents, 1866
 5 coins presented by Mrs. Swainson.
 Spanish Dollar—recoined Portuguese. [Lent by Dr. G. C. Henderson.]
 Jubilee Four Shilling Piece. [Lent by Dr. G. C. Henderson]
 Medal of Glasgow Humane Society. [Lent by Dr. G. C. Henderson.]
 Maryland. Two-dollar Bill, 1770. [Presented by G. A. H. Mould, Esq., A.M.I.C.E.]

APPENDIX K.

List of Institutions to which the Journal is sent.

Note.—Publications are received in exchange from those Institutions marked with a *

I. JAMAICA.

Bethlehem, Moravian Training College for Females.
 Fairfield, Moravian Training College for Males.
 Hope, St. Andrew, University College.
 Kingston, Calabar College.
 Kingston, Jamaica Church Theological College.
 Kingston, Mico Training College.
 Kingston, Constabulary Reading Room.
 * Kingston, Weather Office
 Kingston, Garrison Institute, Up-Park Camp.
 Shortwood, St. Andrew, Female Training College.
 Montego Bay, Reading Club.
 Potsdam School.
 Port Royal, Garrison Reading Room.
 Savanna-la-Mar, Self-Help Institute.
 York Castle, Wesleyan High School.

II. WEST INDIES.

Basse-terre, St. Kitts, Botanical Station.
 Berbice, British Guiana, Public Library.
 Bridgetown, Barbados, Botanical Station.
 Castries, St. Lucia, Botanical Station.
 Fort Royal, Martinique, Botanical Station.
 * Georgetown, British Guiana, The Museum.
 Grand Turk, Turks Island, Jubilee Library.
 Kingstown, St. Vincent, Botanic Gardens.
 Nassau, New Providence, Public Library.
 Plymouth, Montserrat, Botanical Station.
 * Port of Spain, Trinidad, Botanic Gardens.
 * " " " " Victoria Institute.
 Roseau, Dominica, Botanical Station.
 St. George's, Grenada, Botanic Garden.
 St. George's, Grenada, Library.
 St. John's, Antigua, Public Library.
 St. John's, Antigua, Botanical Station.
 St. John's, Antigua, Society of Agriculture.

III. THE UNITED KINGDOM.

Birmingham, The Mason Science College.
 * Kew, Royal Botanic Gardens.
 * London, British Museum, Library.
 * London, British Museum, Natural History Branch, Library.
 * London, Guildhall Library.
 * London, Imperial Institute.

- * London, Colonial Office, Library.
- London, Entomological Society of London, Library
- London, Linnean Society, Library
- London, Royal Society, Library
- London, Zoological Society, Library
- * London, Royal Colonial Institute.
- * London, Royal Geographical Society.
- London, Society of Arts.
- * Newcastle-on Tyne, Geographical Society.
- Edinburgh, Royal Society of Edinburgh.
- Dublin, Royal Irish Academy.
- * Dublin, Royal Dublin Society,

IV.—OTHER EUROPEAN COUNTRIES.

- * Berlin, Germany, Königlische Akademie der Wissenschaften.
- Hamburg, Natural History Museum.
- * Helsingfors, Russia, Societas pro Fauna et Flora Fennica.
- * Modena, Italy, Società dei Naturalisti di Modena.
- * Paris, France, Museum d' Histoire Naturelle.
- * Rome, Accademia dei Lincei.
- Stockholm, Sweden, La Société Entomologique.
- * Upsala, University Library.
- Vienna, Zoologische-botanische Gesellschaft.

V.—CANADA.

- Halifax, The Museum.
- * Halifax, The Nova Scotia Institute of Science.
- * Hamilton, The Hamilton Association.
- * Toronto, The Canadian Institute.

VI.—THE UNITED STATES OF AMERICA.

- Boston Natural History Society.
- Boston, Public Library.
- * Florida, Department of Agriculture.
- * Massachusetts, Tufts College Library.
- New York, Astor Library.
- * North Carolina, Elisha Mitchell Scientific Society.
- * Ohio, State Academy of Science.
- * Philadelphia, American Philosophical Society.
- * Philadelphia, Library of the Academy of Natural Sciences.
- * Washington, Department of Agriculture.
- * Washington, Department of the Interior, Geological Survey.
- * Washington, Smithsonian Institution.
- * Washington, U. S. National Museum.

VII.—NORTH AMERICA.

- Hamilton, Bermuda, Public Library.

VIII.—SOUTH AMERICA.

- Santiago, Chili, Société Scientifique du Chili.

IX.—AUSTRALIA.

- * Sydney, New South Wales, Department of Mines.
- * Sydney, New South Wales, Geological Survey.
- * Sydney, New South Wales, Public Library.
- * Sydney, New South Wales, Royal Society.

X.—NEW ZEALAND.

- * Wellington, New Zealand Institute.

XI.—INDIA.

- Calcutta, The Indian Museum.

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JAMAICA

ANNUAL REPORT

ON THE

INSTITUTE OF JAMAICA,

FOR

THE YEAR ENDED 31ST MARCH, 1898.

Ordered by His Excellency the Governor to be Printed.



J A M A I C A :

GOVERNMENT PRINTING OFFICE, 79 DUKE STREET, KINGSTON.

1899.

ANNUAL REPORT

ON THE

INSTITUTE OF JAMAICA,

FOR THE YEAR ENDED 31st MARCH, 1898.



Institute of Jamaica, Kingston, April 9th, 1898.

The Report is arranged under the following heads :—

I. ORGANIZATION.

- (i) Board of Governors.
- (ii) Committees.
- (iii) Executive Staff.
- (iv) Members.
- (v) Hours of opening.
- (vi) Finance.

II. LITERATURE.

- (vii) Library.
- (viii) Literature in Country Districts.
Mandeville Branch.
- (ix) International Library Conference.
- (x) National Home Reading Union.

III. SCIENCE.

- (xi) Museum.
 - (a) Additions and arrangements.
 - (b) Contributions.
 - (c) Attendance.
 - (d) Live Exhibits.
- (xii) Natural Resources, Economic Products, and Economic Entomology.
- (xiii) Original Researches on Jamaica Natural History.
- (xiv) Museum Notes and Articles.

IV. ART.

- (xv) Art Classes.
- (xvi) Art Gallery.

V. LITERATURE, SCIENCE, AND ART.

- (xvii) Members' Meetings.
- (xviii) Institute of Jamaica Lectures.
- (xix) Journal of the Institute.
- (xx) Other Publications.
- (xxi) Competitions in Literature, Science, Arts and Crafts
- (xxii) Imperial Institute.

APPENDIXES.

Appendix A.—Receipts and Disbursements for the year 1897-98 (i) Vote (ii) Loan Account, (iii) Imperial Institute Account, (iv) Private Funds.

Appendix B.—Record of Readers in the Library for the year ending 31st March, 1898, as compared with the five previous years.

Appendix C.—Classified Return of the number of Works issued from the Library, during the year ended 31st March, 1898, compared with the return for the five previous years.

Appendix D.—Works presented to the Institute, 1897-98.

Appendix E.—Classification of Volumes in the Library of the Institute of Jamaica on the 31st March, 1898, showing the additions made during the year.

Appendix F.—Periodicals and Newspapers on the tables of the Reading Room.

Appendix G.—Additions to the Museum. List of Donors.

Appendix H.—Museum Notes, contributed to the various Newspapers of the island.

Appendix I.—Return of the Visitors in the Museum for the year ended 31st March, 1898, month by month compared with those of the two previous years

Appendix J.—Additions to Art Gallery. (a) Jamaica Portrait Gallery, (b) other additions.

Appendix K.—List of Institutions to which the Journal is sent.

Appendix L.—Competitions in Literature, Science, Arts and Crafts. Financial Statement.

R E P O R T.

I.—ORGANIZATION.

(i.) *Board of Governors.*—During the year the Board has lost as a member Dr. Strachan, who resigned his seat on leaving the island in order to take up an appointment in Lagos. This vacancy was filled by the appointment of the Chief Justice, Sir Fielding Clarke.

(ii.) *Committees.*—The following Committees of Members of the Board have been appointed and have met as occasion required.

It will be seen that there have been 12 ordinary meetings and 1 special meeting of the Board, 22 Committee Meetings and 5 Members' Meetings making a total of 40 meetings during the year.

BOARD.				COMMITTEES.							Grand Total of Board, Committees and Members' Meetings.
	Ordinary Meetings.	Special Meetings.	Total Board Meetings.	Library Committee.	Museum Committee.	Imperial Institute Curatorship.	Special Finance Committee.	Competitions Committee.	Total Committee Meetings.	Members' Meetings.	
Meetings held ...	12	1	13	3	13	1	1	4	22	5	40
Hon. S. C. Burke, M.L.C., Chairman of the Board 1897-98 ...	9	1	10	0	6	...	1	2	9	2	21
Hon. C. B. Mosse, C.B., C.M.G. ...	1	1	2	...	0	...	...	0	0	1	3
Wm. Fawcett, Esq., B.Sc., F.L.S. ...	10	0	10	0	9	...	1	0	10	1	21
J. W. Plaxton, Esq., M.R.C.S. ...	8	1	9	...	13	1	1	0	15	0	24
Rev. Wm. Simms, M.A. ...	9	0	9	2	0	1	1	2	6	2	17
H. Vendryes, Esq. ...	6	0	6	...	4	...	...	...	4	0	10
Rev. Wm. Gillies, D.D. (1) ...	8	1	9	3	...	...	...	1	4	4	17
G. C. Henderson, Esq., M.D., Lond. ...	8	1	9	...	2	...	...	...	2	1	12
W. H. Strachan, Esq., L.R.C.P. (2) ...	2	1	3	...	2	...	...	1	3	0	6
Hon. James Allwood (3) ...	1	1	2	1	...	...	...	0	1	0	3
J. Cargill, Esq., M.D. ...	7	0	7	...	0	...	...	...	0	1	8
Sir Fielding Clarke. (4) ...	3	0	3	...	...	...	...	...	0	0	3

(1) Was off the island between the 1st June and 31st August.

(2) Left the island on 22nd December, 1897.

(3) Was off the Island between June and December.

(4) Was appointed on 30th December, 1897.

(iii) *Executive Staff*.—There have been no changes of importance in the personnel of the Executive staff of the Institute.

(iv) *Membership*.—During their visit to the island at their Marine Biological Laboratory at Port Antonio, the students of the John Hopkins University were made members of the Institute, as were also Professor MacDougal and Professor Campbell of the United States Botanical Commission.

During the year, honorary membership was conferred on Dr. Strachan on his resigning his seat at the Board. One corresponding member has died (Mr. P. L. Simmonds) and none has been elected. One life member, the first Curator of the Museum (Mr. J. J. Bowrey), has died; 31 subscribing members have joined, but the names of no less than 92 have been removed from the roll, by death, resignation and other causes. The roll now stands at—honorary 9, corresponding 15, life 4, subscribing 240: total 268.

(v) *Hours of opening*.—No change has been made in the hours of opening in the Library, Museum or Art Gallery.

(vi) *Finance*.—In Appendix A is given a Statement of the receipts and disbursements of the Institute during the 12 months.

LITERATURE.

(vii.) *Library*—Visitors. Appendix B gives the number of visitors to the Reading Room of the Library during the year (45,274) which, when compared with that of last year (39,573), shows an increase of 5,701, or more than 14 per cent. The largest attendance on any one day occurred on Saturday the 28th of August, when there were 244 readers, as against 193, the highest number on any one day in the previous year. The smallest attendance was on Saturday 1st of January when there were only 35 as against 60, the lowest number in any one day in the previous year. The total for the month of July was the highest on record, January next and August third—all three being higher than the highest month in the preceding year. The months of February and March were, however, lower than the corresponding months in the previous year. A comparison of the attendance on public holidays during the last three years shows that (with the exception of Whit-Monday) the public last year availed themselves less than formerly of the use of the Reading Room on such days. During the year the book-cases lining the walls of the Reading Room were removed to the rooms on either side, and much-needed space was thus made in the Reading Room for extra sitting accommodation. A portion of the west (or front) piazza was also set apart for a members' room.

Works issued.—Appendix C gives the number of works lent out during the year (5,260) which, when compared with last year (6,343), shews a decrease of 1,083 volumes; a natural result of the falling off in the number of members, the average number of books borrowed per member being approximately the same, *i.e.*, 22.

Additions to the Library.—As will be seen from Appendix D, 492 works have been acquired during the year, 326 by donation and 166 by purchase. The Board would here record its thanks to those who have kindly made donations to the Library: their names are recorded in the Appendix.

Lists of works added have, from time to time, appeared in the "Gleaner" newspaper.

In Appendix E will be found a return giving the number of volumes in the Library under each head of the classification, showing the number of works added during the year under each head. The total number of volumes in the Library is 10,455, of which 882 deal exclusively with Jamaica, and 571 with the West Indies (other than Jamaica).

In Appendix F is given a list of the periodicals and newspapers on the table of the Reading Room. These are put in circulation amongst members so soon as new issues arrive.

Card Catalogue.—A card-catalogue (on the plan usually adopted in public libraries) of all the books added to the library since the catalogue was printed in 1895 has been prepared, and is placed in the reading room for the use of members of the Institute and the public. It contains 3,217 entries, including cross-references. It may be mentioned that the cabinet containing it was made in the Institute.

(viii.) *Literature in the Country Districts*.—Correspondence has been carried on during the year with reference to the proposed formation of Branches of the Library in various towns, and the extension generally of literary advantages to the country parts of the Island. In its last report the Board had to record the failure of its endeavour to form a branch at Montego Bay, owing to the withdrawal of the local committee at the last moment. During the year just closed a similar failure has occurred in connection with Port Maria. At the request of certain gentlemen in the town, who formed themselves into a local committee, the Board undertook to form a branch at Port Maria. As long ago as last September, the committee was informed that the books and book-case were ready to be sent. But the local committee has failed to avail itself of the offer.

In the endeavour to extend the advantages of literature to the country parts of the Island in a manner simpler than that involved in the formation of branches, *i.e.* in the form of sets of books of 100 each, at a nominal cost, to the committees of local societies or other responsible persons, the Board has met with more encouraging results.

A commencement has been made in this direction by the loan of 100 books to the Black River Young Men's Reading Club, which, it is trusted, may be the forerunner of similar loans elsewhere. In fact, negotiations are in progress for a similar supply of books to Chapelton.

From the correspondence above alluded to, it would seem that there are people in the townships of Jamaica anxious to have the advantages offered by branch libraries, but there is a sad lack of effective agents willing to undertake the trouble of managing such institutions, and without such agency it is difficult to encourage the desire for literature which is beginning to show itself in rural districts.

It is generally conceded that public libraries in other countries play an important part in the education and development of the people socially and morally, and the Board feels that this might be the case in Jamaica.

The supply of wholesome literature is almost as important to the welfare of a people as the supply of wholesome air and water.

The education now given in the schools fails in part owing to a lack of provision for a supply of suitable literature for students as they leave school, which need would be met by the establishment of small public libraries. If there were a public library in each of the Parishes of the Island in connection with the library of the Institute, many books would circulate throughout the country and could not but have much influence for good. But such a scheme would involve an expenditure altogether beyond the powers of the Board to meet with the present grant.

Mandeville Branch.—The Branch of the Library established at Mandeville has, under the honorary secretaryship of Mr. M. F. Johns, continued to prosper. During a year of general depression it is not to be wondered at that it has not increased; but with the aid of a grant of £53 from the Board, the local committee have been able to keep open a public reading room in their midst, in addition to lending books to members. During the year one of the two sets of books of 100 each first sent to the branch has been changed for another set.

(ix.) *International Library Conference.*—At the request of the Organizing Committee of the International Library Conference held in London in 1897, the Secretary of the Institute prepared a paper on "Library work in Jamaica," which was read on his behalf by the Rev. Wm. Gillies, D.D., the Chairman of the Library Committee, who represented the Institute at the Conference.

(x.) *National Home Reading Union.*—The progress made in this movement has not been very encouraging. For the season 1896-97 there were 67 members. For the season 1897-98 at present there are only 37 members.

In this matter, as in many others in Jamaica, a great deal depends upon the persistent work of one individual; when he has, for some reason or other, to relinquish the work, the work stops.

III.—SCIENCE.

xi. *Museum*—(a) *Additions and Arrangements.*—During the year the Museum was able to procure the temporary services of a taxidermist, and much needed additions of stuffed specimens and preparations of some of the larger animals were obtained. These include a large green turtle, *Chelone midas*, the live animal being presented by Mr. Eden; a pond turtle, *Emys rugosa*; a South American tortoise, *Testudo carbonaria*; and a disarticulated skeleton of the lobster, *Panulirus americanus*.

The Jamaica terrestrial and aquatic molluscs are in process of being displayed. Many additions to the collection of Crustacea, named by Miss Rathbun, of the Smithsonian Institution, have been made. An almost complete series of the thirty-five known species of Jamaica Actiniaria, collected by the Curator, has been placed on exhibition. Smaller additions have been made to the corals, and to other groups of both vertebrates and invertebrates. A large series of Sponges, contributed by the Caribbean Sea Fisheries Development Syndicate, constitutes almost the beginning of the local collections in this group. One compact massive sponge is two feet in diameter.

A three to five per cent. solution of Formalin has now been employed for over two years as a preservative fluid for fish, coelenterates, holothurians, &c., and has proved satisfactory, preserving the natural form and colours of the animals better than alcohol.

A polished slab of mahogany, four feet in diameter, has been added to the collection of woods, and illustrates the irregular increase in thickness of tropical trees, as compared with the regular annular rings in dicotyledons of temperate parts.

New types and many duplicate examples of relics of the aboriginal Indian inhabitants continue to be received and added to the already large collection on view and in store cases. Mr. Swaine has lent seven specimens of Indian stone implements from St. Vincent, for comparison with the Jamaica forms.

The collection originally got together as a duplicate of that forwarded to the Imperial Institute is now being transformed into a special collection to represent, and assist in developing, the Economic Products and Resources of Jamaica. Examples of such will be received from all parts of the island, and, where suitable, placed on exhibition.

Several stands for exhibiting objects have been constructed, and broad shelves fixed to the window bottoms on the upper floor, to enable specimens in preservative fluid in jars to be placed in contiguity to their dried relatives in the table-cases along the walls.

(b.) *Contributions.*—The voluntary contribution of objects to the Museum appears to be on the increase, and, while many are not of great importance, the contributions indicate a decided interest in Natural History, and afford the Curator an opportunity of coming in contact either personally or by correspondence with their contributors. When requests for particular specimens are made through the press, there is almost invariably an encouraging response.

The list of contributors and objects presented is published month by month in the local papers. The complete list of the year is given in Appendix G. Special mention may be made of Dr. H. Strachan's presentation of a binocular microscope for laboratory use; a cabinet of insects, by Mr. F. C. Nicholas, New York; a collection of aboriginal Indian Pottery, by the Franciscan Sisters, Kingston; and Mr. Leo Verley's contribution of two live yellow snakes, *Epicrates inornatus*, now nearly extinct in the island, but surviving on Goat Island.

(c.) *Attendance.*—During the year an alteration has been made in the method of recording the number of visitors. Formerly visitors were requested to sign in the visitors book. This method, by means of which only about half the actual number of visitors was recorded, has been discontinued.

Each visitor is now noted in a book kept by an attendant. The returns month by month are given in Appendix I, along with those of the two previous years, but owing to this alteration no value can be attached to any comparison. The numbers indicate an average daily attendance of between fifty and sixty. The almost invariable visit to the Museum and other parts of the Institute on the part of American and other tourists to the island, is worthy of mention.

(d.) *Live Exhibits*.—Live examples of various groups of animals are maintained in the grounds of the Institute; but with the present lack of space, this evidently attractive feature of the work of the Museum can not be further developed. During the year specimens of the following have been, and in most cases are still, on view:—Mongoose, *Herpestes*, squirrels, South American Agoutis, an Indian Coney, *Capromys brachyurus*; Birds, including most of the native pigeons, as well as doves, hawks, parrots, a macaw, heron, nightingales, etc.; several Crocodiles, *Crocodilus americanus*; pond turtles, tortoises; yellow snakes, spotted-chinned snakes, and different species of lizards, including an *iguana*, the species being now nearly extinct on the island.

xii. *Natural Resources, Economic Products and Economic Entomology*.—In addition to the ordinary work of developing and caring for the Museum collections, the Curator is consulted upon matters connected with the various mineral and other resources of the island, the numerous economic products, and particularly upon matters relative to agricultural pests. The examination, identification, and correspondence in connection with such absorbs a good portion of the official time, and is on the increase.

In view of the relationship considered to exist between the cattle fever lately prevalent in Jamaica and the presence of ticks, an endeavour was made to obtain, from all parts of the island, specimens of the latter, for purposes of identification. Twenty-five lots from different animals, were contributed and forwarded for determination to Prof. L. G. Neumann, Ecole Nationale Veterinaire, Toulouse. The results obtained up to date are recorded in the Journal of the Institute, Vol. II., No. 5.

During the latter part of the year, the Caribbean Sea Fisheries Development Syndicate has carried out investigations in Jamaica waters by means of a steam trawler, with a view to establishing a fisheries industry on a large scale. Its operations have, unfortunately, not given any promise of success, owing to the scarcity of fish and to the coral nature of the sea floor. A record of its operations is being prepared by the Curator so as to give permanency to the results.

xiii. *Original Researches on Jamaica Natural History*.—Research work, mainly upon the Zoophytes occurring in the waters around the island, has been conducted in the Biological Laboratory of the Institute. The following papers by the Curator of the Museum have been published during the year:—

“The Actiniarian Family Aliciidae,” *Annals and Magazine of Natural History*, ser. 6, vol. xx, July, 1897.

“Jamaican Actiniaria. I. Zoantheæ,” *Transactions of the Royal Dublin Society*, VII., 1898.

“The Geographical Distribution of the Actiniaria around Jamaica.” *Natural Science*, February, 1898.

“The Actiniaria around Jamaica,” *Journal of the Institute of Jamaica*. Vol. II., No. 5, 1898.

“Aboriginal Indian Remains in Jamaica,” with a “Note on the Craniology of the Aborigines of Jamaica” by Prof. A. C. Haddon, *Journal, Institute, Jamaica*, Vol. II., No. 4, 1897.

Of other papers, founded upon material collected in Jamaica, and published during the year may be mentioned:—

“List of the Decapod Crustacea of Jamaica,” by Miss Mary J. Rathbun, *Annals, Institute of Jamaica*, Vol. I., No. I, 1897.

“*Synapta vivipara*: A contribution to the Morphology of the Echinoderms,” Herbert Lyman Clark, *Mem. Bos. Soc. Nat. Hist.*, Vol. V. No. 3, 1898.

“Notes on the Cubomedusæ.” F. S. Conant, *Johns Hopkins Univ. Circ.*, Vol. XVIII, No. 132. November, 1897.

“Description of Species of Rudistæ, from the Cretaceous Rocks of Jamaica. W. L., collected and presented by Mr. F. C. Nicholas,” R. P. Whitfield, *Bull. Amer. Mus. Nat. History*, N. Y., Vol. IX, 1897.

“Observations on the Genus *Barrettia*, Woodward, with description of two new species,” R. P. Whitfield, *Bull. Amer. Mus. Nat. Hist.*, N. Y., Vol. IX, 1897.

“An Indigenous Muridæ, in the West Indies, with the description of a new Mexican *Oryzomys*.” Oldfield Thomas, *Annals and Magazine of Nat. Hist.*, Ser. 7, Vol. I., February, 1898.

Papers connected with the Botany of the Island are recorded in the Bulletin of the Botanical Department

During the summer a large party of students, under the late Prof. J. E. Humphrey, from the Johns Hopkins University, Baltimore, visited Jamaica, making Port Antonio the head-quarters of a Marine Biological Laboratory. The Curator of the Museum was kindly granted the occupancy of a table for three weeks. Much valuable material for future biological research was obtained by the students. A full account of their operations, by Prof. W. K. Brooks, is reprinted from the Johns Hopkins University Circular in the Journal of the Institute, Vol. II., No. 5

(xiv.) *Museum Notes and Articles*.—Various Museum Notes, Articles, and Reviews on subjects connected with Jamaica Natural History have been contributed to the local papers from time to time; many of them, having a permanent importance, have been reprinted in the Journal of the Institute. The list is given in Appendix H.

IV.—ART.

(xv.) *Art Classes*.—The Board regrets that it has again to record its inability to find a suitable instructor for the Art Classes.

(xvi.) *Art Gallery*.—In Appendix J. there is a list of portraits and other objects which have been added to the Jamaica Art Gallery.

There are now 85 portraits of personages celebrated in Jamaica history, which should tend to encourage interest in the history of the island.

V.—LITERATURE, SCIENCE AND ART.

(xvii.) *Members' Meetings*.—During the year five members' meetings were held. The following papers were read:—"The Romance of Plant Life," by Dr. D. Morris, C.M.G.; "Celebrated Cities," Edinburgh by W. P. Livingstone; and Cambridge, by Hon T. Capper, B.A.; "Movement in Plants" by Prof. MacDougal, M.A., M.S., Ph. D.; "Butterflies and Moths," by P. J. Lathy; and "The Relationship between Sea Anemones and Corals" by J. E. Duerden, A.R.C.Sc.

(xviii.) *Institute of Jamaica Lectures*.—These Lectures have been in abeyance during the past year.

(xix.) *Journal of the Institute*.—During the year, two parts of the Journal have been issued: the first a special number by the Curator of the Museum Mr. J. E. Duerden, A. R. C. Sc. with illustrations on "The Aboriginal Indian Remains of Jamaica," the other containing amongst others, the following articles:—Nelson in the West Indies (i) Jamaica, by Robert Johnstone, F. R. Met. S.; "Jamaica," a prize Poem by Herbert T. Thomas. Jamaica Worthies—(xvii) Sir Edward Newton, K.C.M.G.; (xviii) William James, by H. Y. Powell; and (xix) James John Bowrey, F.I.C. by J. E. Duerden, A.R.C. Sc. Lond.; "The Life history of some Jamaica Hesperiidæ," by E. Stuart Panton; "The Cockpit Country and the White Limestone of Jamaica," by Francis C. Nicholas; "Indian Remains in Vere, Jamaica," by R. C. MacCormack; "The Actiniaria around Jamaica," by J. E. Duerden; "Handel," by Miss Clara Myers; "The Industrial Arts of India" by Miss Donnelly; and "A Brief Sketch of the History of Painting in England," by the Editor.

(xx.) *Other Publications*.—The first of a new series of publications by the Institute called "The Annals of the Institute of Jamaica," under the Co-Editorship of Dr. Plaxton and Mr. Duerden, consisting of a "List of the Decapod Crustacea of Jamaica" by Miss Rathbun, of the National Museum, Washington, has been published.

A revised edition of "Jamaica in 1896" called "Jamaica in 1897" was issued, one hundred and fifty copies being forwarded to the Emigrants Information Office at Westminster for distribution amongst possible settlers in the island. Copies were also presented to the principal libraries in the United Kingdom and the United States, and were placed on sale with the Institute's Agents in London.

The Secretary also re-wrote, at the request of the Government, the description of Jamaica in the "Emigrant's Information Office Hand-Book to the West Indies."

(xxi.) *Competitions in Literature, Science, Arts and Crafts*.—The competitions in Literature, Science, Arts and Crafts which it was decided to hold under the management of the Board, duly took place in June, 1897, and the prizes were distributed at the Institute by Lady Blake on the 1st July.

The Report of the Organizing Committee—to whom the Board has already expressed its thanks—has been printed in the Journal of the Institute (Vol. II., No. 5) together with the list of the prize-winners.

In spite of a somewhat liberal response to a request which was made for subscription to the fund, the undertaking resulted, as was anticipated it would result, in a financial loss. As will be seen from the financial statement given in Appendix L, the Competitions cost the Institute in the aggregate the sum of £55 14s. 7d. Deducting the grant of £20 made to the undertaking, and £25 11s. 3d. the value of the prizes and material taken over, the nett loss stands at £10 3s. 4d. The Welsh Eisteddfod of last year, where Eisteddfodau have been held for many centuries, also resulted in a financial loss.

The Board is satisfied, however, that the funds placed at the disposal of the Organizing Committee and raised by it were economically spent; it is convinced that the competitions on the whole secured the objects aimed at, and it is confident that any similar undertaking held in the future would have prospects of greater success.

(xxii.) *Imperial Institute*.—After mature deliberation, the Board expressed to the Government its sense of the unsatisfactory nature of the relations existing between the Institute of Jamaica, and the Jamaica Court at the Imperial Institute; and, at its own request, the Board was relieved of any responsibility in connection with the maintenance of the Court; continuing only such part of the duties which it had assumed in connection with this matter as dealt with the development of the raw products and industries of the island. At the same time the Board expressed to the Government its conviction of the debt which the colony owes to Mr. Washington Eves, for the assistance he has rendered, and, in the aggregate, considerable amount of work he has performed for the colony in connection with the Imperial Institute.

In conclusion, the Board feels that the work of the Institute has been maintained quite as fully, and as much progress has been made, as could have been expected during a year of considerable depression, affecting all classes of the community.

S. CONSTANTINE BURKE, Chairman of the Board, 1897-98.

FRANK CUNDALL, Secretary of the Institute of Jamaica.

APPENDIX B.

Record of Readers in the Library for the year ending 31st March, 1898, as compared with the five previous years.

Month.	1897-98.			1896-97.			1895-96.			1894-95.			1893-94.			1892-93.		
	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.
April	1,901	1,887	3,788	1,733	1,149	2,882	1,748	1,266	3,014	1,081	998	2,079	922	606	1,528	789	541	1,330
May	1,987	1,702	3,689	1,742	1,168	2,910	2,019	1,443	3,462	1,112	982	2,094	963	770	1,733	669	528	1,197
June	1,899	1,591	3,490	1,624	1,338	2,962	1,728	1,453	3,181	1,146	973	2,119	930	752	1,682	664	595	1,259
July	2,223	2,049	4,272	1,733	1,449	3,182	1,654	1,447	3,101	1,336	974	2,310	1,029	732	1,761	754	545	1,299
August	2,253	1,889	4,142	1,860	1,610	3,470	1,473	1,422	2,895	1,330	1,065	2,395	1,178	827	2,005	623	425	1,048
September	2,213	1,742	3,955	1,687	1,495	3,182	1,782	1,298	3,080	1,273	937	2,210	1,143	830	1,973	711	677	1,388
October	1,778	1,785	3,563	1,879	1,659	3,538	1,848	1,264	3,112	1,266	1,143	2,409	1,106	837	1,943	846	579	1,425
November	1,787	1,865	3,652	1,601	1,603	3,204	1,790	1,139	2,929	1,508	1,155	2,663	1,164	829	1,993	763	642	1,405
December	1,814	1,770	3,584	1,610	1,416	3,026	1,502	1,054	2,556	1,252	931	2,183	1,022	833	1,855	690	448	1,138
January	2,078	2,113	4,191	1,898	1,728	3,626	1,600	1,122	2,722	1,701	1,311	3,012	1,275	1,002	2,277	889	613	1,502
February	1,621	1,749	3,370	1,749	1,709	3,458	1,713	1,210	2,923	1,791	1,132	2,923	1,064	947	2,011	830	630	1,460
March	1,710	1,868	3,578	2,022	2,111	4,133	1,498	926	*1,424	2,065	1,339	3,404	1,252	1,088	2,340	925	654	1,579
	23,264	22,010	45,274	21,138	18,435	39,573	20,355	15,044	35,399	16,861	12,940	29,801	13,048	10,053	23,101	9,153	6,877	16,030

* Closed for 5 afternoons and 3 whole days.
† Closed for 2 Public Holidays.
‡ " 2 days for alterations.

Totals

1897-98
1896-97
1895-96
1894-95
1893-94
1892-93

...
...
...
...
...

45,274
39,573
35,399
29,801
23,101
16,030

1897-98
1896-97
Increase

COMPARISON.

45,274
39,573
5,701 or 14 per cent.
over last year.

APPENDIX C.

Classified Return of the number of Works issued from the Library during the year ended 31st March 1898, compared with the return for the five previous years.

Number of Borrowers.	1897-98.		1896-97.		1895-96.		1894-95.		1893-94.		1892-93.	
	234		289		272		288		237		229	
	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.
Theology; Philosophy, &c. ...	34	.65	79	1.25	78	1.27	84	1.36	110	1.84	90	1.95
History, Biography, Travels, &c. ...	484	9.20	560	8.83	398	6.47	545	8.83	529	8.86	540	11.70
Law, Politics, Sociology, &c. ...	81	1.54	70	1.10	52	0.85	43	0.70	35	0.58	29	0.63
Art, Science, Natural History ...	229	4.35	310	4.89	276	4.49	269	4.36	340	5.69	186	4.03
Poetry and Drama ...	113	2.15	90	1.42	66	1.07	59	0.95	79	1.32	142	3.08
Prose Fiction ...	2,254	42.85	2,550	40.20	2,193	35.66	2,476	40.10	2,897	48.52	2,021	43.78
Miscellaneous ...	120	2.28	103	1.70	87	1.41	131	2.12	89	1.49	137	2.97
Periodicals ...	1,851	35.19	2,499	39.40	2,916	47.41	2,435	39.43	1,798	30.11	1,387	30.05
West India ...	94	1.79	77	1.21	84	1.37	133	2.15	94	1.59	84	1.81
	5,260	100.00	6,343	100.00	6,150	100.00	6,175	100.00	5,971	100.00	4,616	100.0
Comparison	...		...		1896-97		...		6,343			
"	...		...		1897-98		...		5,260			
					Decrease		...		1,083			

APPENDIX D.

WORKS PRESENTED TO THE INSTITUTE, 1897-98.

Bound Volumes presented.

	Vols.		Vols.
E. B. Lynch, Esq. ...	8	Dr. Love ...	1
Rev. J. B. Ellis, M.A. ...	1	Royal Colonial Institute ...	1
Miss Foster ...	1	Robert Johnstone, Esq. ...	9
Inspector McCrea ...	1	U. S. Department of Agriculture ...	1
C. W. Willis, Esq. ...	1	Canadian Government ...	2
Dr. I. Anderson ...	1	J. W. Curwen, Esq. ...	1
O. Marescaux, Esq. ...	4	U. S. Commission of Education ...	1
Messrs. DeCordova & Co. ...	1	The United States Consul ...	2
G. Solomon Esq. ...	1	Miss Gayleard ...	15
C. C. Walker, Esq. ...	1	Rev. Wm. Gillies, D.D. ...	2
Sir George Grove ...	1	U. S. National Museum ...	2
Smithsonian Institution ...	6	Leslie Alexander, Esq. ...	1
Miss Roby ...	1	T. Hendrick, Esq. ...	1
Kingston Improvement Commis- sioners ...	1	U. S. Geological Survey ...	2
Colonial Secretary ...	9	Kew Gardens ...	1

Pamphlets, etc., presented.

Messrs. Pearce & Roxburgh ...	1	Salem Public Library ...	4
Colonial Secretary ...	167	J. H. Hart, Esq. ...	1
U. S. Department of Agriculture ...	6	Royal Society, New South Wales ...	3
Peabody Museum ...	2	University of Upsala ...	1
A. Malabre, Esq. ...	1	C. A. Barber, Esq. ...	2
Emigrants Information Office ...	2	Geo. Duff, Esq. ...	1
Royal Society of Edinburgh ...	1	E. H. Aitken, Esq. ...	1
Nova Scotia Institute ...	1	R. Gulierrez, Esq. ...	1
Brazilian Government ...	1	Professor I. Urban ...	5
Messrs. Raleigh & Ramsay ...	1	City Council, Kingston ...	3
Society of Naturalists, Moscow ...	1	Rev. Wm. Pratt, M.A. ...	1
J. Gall, Esq. ...	1	New York State Museum ...	1
Scientific Association, Trinidad ...	1	Jewish Historical Society ...	1
Hatch Experiment Station ...	9	Indiana Academy of Science ...	2
Volta Bureau ...	2	Academy of Science, St. Louis ...	13
The Archbishop of the West In- dies ...	1	Smithsonian Institution ...	8

SUMMARY.

Bound Volumes presented	...	80
Pamphlets, etc. „	...	246
Volumes purchased	...	166
Pamphlets „	...	0

APPENDIX E.

CLASSIFICATION OF VOLUMES IN THE LIBRARY OF THE INSTITUTE OF JAMAICA ON THE 31ST MARCH, 1898.
SHOWING THE ADDITIONS MADE DURING THE YEAR.

—		No. on 31st March, 1897.	No. added during year, 1897-98.	Total.
Ia.	Jamaica ...	850	32	882
Ib.	West Indies ..	551	20	571
Ic.	West Africa ...	13	5	18
IIa.	Theology ...	289	4	293
IIb.	Philosophy ...	219	...	219
IIIa.	History ...	1,396	32	1,428
IIIb.	Biography ...	1,019	25	1,044
IIIc.	Travels ...	588	9	597
IVa.	Laws, Politics, Sociology ...	395	3	398
IVb.	Education ...	272	4	276
Va.	Art ...	184	17	201
Vb.	Science and National History ...	1,317	26	1,343
VI.	Poetry and the Drama ...	294	4	298
VII.	Linguistics and Philology ...	85	...	85
VIII.	Prose Fiction ...	1,291	36	1,327
IX.	Miscellaneous ..	599	4	603
X.	Dictionaries and Works of Reference ...	396	7	403
XI.	Reports of Societies ...	444	25	469
		10,202	253	10,455

APPENDIX F.

Periodicals and Newspapers on the Tables of the Reading Room.

Agricultural Gazette, New South Wales	Fortnightly Review
Annals and Magazine of Natural History	Gall's News Letter, (Jamaica)
Army List	Gardener's Chronicle
Art Amateur	Gerdner's Monthly (Jamaica)
Art Journal	Gentlewoman, The
Athenæum	Geographical Journal
Blackwood's Magazine	Graphic
Book News	Gleaner (Jamaica)
British Trade Journal	Harper's Magazine
Budget (Jamaica)	Home Art Work
Builder	Illustrated London News
Bulletin of the Botanical Department (Jamaica)	Jamaica Advocate
Bulletin of the Torey Botanical Club	Jamaica Baptist Reporter
Cassell's Saturday Magazine	Jamaica Churchman
Catholic Opinion (Jamaica)	Jamaica Gazette
Century Magazine	Jamaica Post
Chamber of Commerce Journal	Jamaica Teacher
Chambers' Journal	Jamaica Weather Report
Colonies and India	Johns Hopkins University Circulars
Commerce	Journal of the Board of Agriculture
Contemporary Review	Journal of the Imperial Institute
Cornwall Herald (Jamaica)	Journal of the Institute of Jamaica
Cornwall Times (Jamaica)	Journal of the Jamaica Agricultural Society
Edinburgh Review	Journal of the Trinidad Field Naturalists Club
Engineering	Kew Bulletin
English Illustrated Magazine	Leisure Hour
English Mechanic	Library
European Mail	Literary Work
Farm Poultry	Macmillan's Magazine
Field	Magazine of Art

Musical Herald	Queen
Natural Science	Review of Reviews
Nature	Revue des deux Mondes
Navy List	Saturday Review
New York Herald	Scientific American
Niger and Yoruba Notes	" " Supplement & Building Edition
Nineteenth Century	Scribner's Magazine
Nineteenth Century (Jamaica)	Spectator
North American Review	Strand Magazine
Odd Fellows Magazine	Sugar Cane
Presbyterian (Jamaica)	Timehri (British Guiana)
Proceedings of the Zoological Society	Times (London) Daily
Public Opinion	Times (") Weekly
Publishers Circular	Tropical Agriculturist
Punch	West Indian and Commercial Advertiser

APPENDIX G.

Additions to the Museum.

LIST OF DONORS.

Aird, A. A.	...	Coll. of ticks from horses.
Alexander, L.	...	Caterpillar; Pottery and earth from Money Cave: Spotted chinned snake, <i>Liophis callilæmus</i> .
Armstrong, Miss	...	Earth balls; Coll. of shells, etc.
Baxter, Captn.	...	Numerous collections of ticks from horses.
Beer, Mrs.	...	Crabs, <i>Pinnotheres</i> from oysters: Moth.
Berger, E. W.	...	Obisium sp. ?, from Port Antonio.
Berry, Hon & Rev. C. B.	...	Chicken Hawk, <i>Buteo Borealis</i> , with parasitic fly, <i>Ornythomyia</i> ; Scorpion-spider, <i>Tarantula</i> ; Decomposing granite.
Blake, Sir H. A.	...	Various specimens of Rock.
Blake, Lady	...	<i>Crocodilus Americanus</i> , young, just before hatching.
Bowrey, J. J. (the late)	...	Insects eggs and abnormal flower of Canna. Moth.
Boyd, F. K., B.A.	...	Live larval ticks.
Burke, S.C., junr.	...	White Ibis, <i>Guara Alba</i> .
Campbell, C.	...	Seeds of Milk Whithe; Water beetle, <i>Cybistra</i> sp.; Beetle, <i>Situs</i> sp.; Scorpion, <i>Centrurus margaritatus</i> ; Live Water Thrush, <i>Sirius noveboracensis</i> .
Campbell, Mrs. C. R.	...	Live South American Parrot.
Capper, Hon. T.	...	Almond Bag Worm, <i>Oiketicus abbotti</i> ; Beetle, <i>Sternodontes damicornis</i> .
Cargill, Dr. J.	...	Young crocodile with yolk sack attached; Beetles, <i>Gymnates lanius</i> ; Gecko or croaking lizard, <i>Aristelliger præsignis</i> ; Fœtus, one month old.
Clarke, Dr. H. L.	...	<i>Chirodota rotifera</i> ; <i>Synapta</i> sp., from Port Antonio.
Clarke, Hon. & Rev. H.	...	Collection of <i>Tarantula</i>
Clarke, W. E.	...	Praying Mantis; Beetle.
Clarke, S.	...	<i>Sternodontes damicornis</i> ; Collection of <i>Tarantula</i> .
Cockerell, Prof. T. D. A.	...	<i>Oiketicus townsendi</i> , from Mesilla.
Collins, N. & P. J.	...	Fiddle fish, <i>Rhinobatus undulatus</i> .
Conant, Dr. F. S.	...	<i>Charybdea</i> , <i>Sagitta Flaccida</i> , from Port Antonio.
Cooke, G. H.	...	<i>Squilla</i> ; Fragment of silicified wood from the Rectory, Old Harbour.
Cradwick, Mrs.	...	Ticks, Rats, and Live Pond Turtle, <i>Emys rugosa</i> ; Soap berries; Spider.
Cradwick, W.	...	Hermit Crab, <i>Cænobita diogenes</i> ; Beetles, <i>Strategus titanus</i> ; Wasp's nests, etc.
Cundall, F.	...	Spotted chinned and Two-headed Snakes, <i>Liophis callilæmus</i> , <i>Typhlops lumbricalis</i> ; Fish moth, <i>Lepisma</i> ; larvæ and beetle of book worm; larval insect case.
Dewar, G. G.	...	Collection of Ticks from dog.
Douet, G. A.	...	Caterpillars from Orange trees; larvæ, &c. beetles.
Dowding, Commodore	...	Micaceous Iron Ore.
Drummond, A.	...	Ball of Milk Withe (<i>Forsteronia floribunda</i>) rubber.
Duerden, J. E.	...	Various Marine collections from Port Antonio, Kingston Harbour. &c.
Edwards, S.	...	Ticks, Centipedes; Spotted-chinned Snake, <i>Llophis calliæmus</i> ; Galli-wasps, <i>Diploglossus hewardii</i> .
Elliott, E.	...	Ground Lizard, <i>Ameira dorsalis</i> , with two tails.
Elliott, G.	...	Black spider; Water scorpion, <i>Belostoma Grandis</i> .

Ewen, Hon. R. M.	...	Coll. of Ticks
Fawcett, W.	...	Live Rat; <i>Cicado septendicen</i> ; <i>Gymæcea</i> ; <i>Zylocopa ænipennis</i> Ichneumonfly, <i>Gymnetis lanius</i> ; <i>Mantis</i> ; Spider, Scorpion, <i>Centrurus margaritatus</i> .
Foster, E.	...	Specimens of supposed gold-bearing Rocks and Crystals.
Francis, F.	...	Two Snake's waiting boy lizards, <i>Mabuia sloanii</i> .
Franciscan Sisters	...	Coll. of Cherique Indian Pottery.
Gibb, Dr. J. M.	...	Ticks; Parasitic worms, <i>Ascaris megalcephala</i> ; Two fætal calves.
Goodwin, R. N.	...	Specimens of Pottery and Sandstone from Navassa.
Grabham, Dr. M.	...	Satin Wood, <i>Fagara Flava</i> .
Grey, H. J. R.	...	Three live young John Crows, <i>Catharte saura</i> in white plumage. Double Ackee.
Grinan, A.	...	Two young Crocodiles, <i>Crocodilus Americanus</i> , caught at Albion Pond.
Harris, F. G.	...	Screech Owl, <i>Aluco pratincola</i> ; Coll. of Earth Worms; Live young Pigeon Hawk, etc.
Harris, Miss M.	...	Fresh Water Crabs, <i>Sesarma</i> , from Clyde River.
Hart, A. J.	...	Dragon Fly; Insects and Quartz Crystal, Cricket, <i>Cicado septendecin</i> ; Beetle, <i>Gymnatis lanius</i> .
Henderson, Eden and Co.	...	Live Green Turtle, <i>Chelone midas</i> .
Henderson, Dr. G. C.	...	Boring Bees, <i>Zylocopa æneipennis</i> from block of Cedar; Fœtus.
Hinchelwood, J. A.	...	Potoo Owl, <i>Pseudoscops grammicus</i> .
Kemble, F.	...	Stick insect; Cocoon and larva; Imitation fossilized heel; Dragon Fly.
Laidman, J. and C.	...	Live Mongoose, <i>Herpestes</i> , Live Bird.
Lathy, A.	...	Fireflies, <i>Pyrophorus</i> ; Stick insects.
Lawton, Sergt.-Major J.	...	Two live Antillean Mocking Birds, <i>Mimus orpheus</i> .
Levy, A. D. C.	...	Beetle, <i>Gyrinus</i> ; Beetle, <i>Sternodontes damicornis</i> .
Marescaux, O.	...	Nest of Trap-door Spider from Corsica; Spiders' Eggs.
McDonald, J.	...	Specimen of Coal from Hanover.
McKinnon, L. F.	...	Live Caterpillar; Moth, <i>Amphonyx cluentius</i> .
McNair, J.	...	Tiger-cat skin, tiger cacao, bill bird, Wild Patridge egg, Armadillo shells, from Central America.
McWhinney, W.	...	Live spotted chinned Snake, <i>Liophis callilæmus</i> : Two-headed Snake, <i>Typhlops lumbricalis</i> .
Moxsy, S.	...	Live Spider, Ticks from pig; Two-headed Snake, <i>Typhlops lumbricalis</i> .
Neish, Dr. W. D.	...	Four Indian Celts and three smooth stones.
Newman, W. G.	...	Praying Mantis; Ticks; Spotted-chinned snake <i>Liophis callilæmus</i> ; Earthworms.
Nicholas, F. C.	...	Collection of 28 Species of Lepidoptera from vicinity of New York, identified by Pro. W. Benteinmuller; Collection of fragments of Pottery from Sierra Marta Mts, S. A.: Long perforated Quartz beads found in Sierra Nevada de Santa Marta Mts. of Colombia; Collection of 87 species of shells from Georgia Coast, Colombia, and from Bay Island, Honduras.
Nunes, W. G.	...	Live Black crab, <i>Gecarcinus ruaiicola</i> ; Spider crab.
Ormsby, J. D.	...	Collection of Ticks, snails, and pupa of Caterpillar.
Palmer, Miss	...	Collection of Marine shells from Dry Harbour.
Parker, Dr. G. H.	...	Sea Anemones, <i>Metridium</i> .
Plaxton, Dr. J. W.	...	Dead Ceylon Squirrel; Ticks adhering to fowl; two live jelly fish, <i>Aurelia</i> ; Bats; live Black crab; <i>Gecarcinus ruricola</i> .
Reece, Justice	...	Three fossil casts of Bivalve shells from Pedro, and specimen of Obsidian from Barbados.
Robeiro, Mrs.	...	Green Lizard, <i>Dactyloa Edwardsii</i> and Galliwasps, <i>Diploglossus hewardii</i> .
Rouse, J.	...	Scorpions; Dragonflies; Bullfrog, <i>Bufo aqua</i> , with ticks; Insects; Land Turtle; Beetles, <i>Eburea drastalasta</i> .
Roxburgh, T. F.	...	Macaca worms; Earthworms.
Salmon, E. L.	...	Spiders, Water Scorpion, <i>Belostoma grandis</i> ; Live Crab-catcher.
Scotland, Rev. H.	...	Specimens of Rocks and fossils; Samples of Jamaica Whetstone.
Strachan, Dr.	...	Live Spider; Beetle, <i>Polycesta depressa</i> and Millepede; <i>Solifuga</i> ; Binocular microscope and Cabinet of Insects.
Swainson, Mrs.	...	Luminous Caterpillar; Insect larvæ.
Thompson, Dr. G. W.	...	Live Venus or Green Lizard, <i>Dactyloa Edwardsii</i> .
Thompson, S.	...	Live Chicken Hawk, <i>Buteo borealis</i> .
Tillman, J.	...	Live Mongoose, <i>Herpestes</i> .
Tivy, E.	...	Yellow-beaked Tropic Bird; Coll. of Centipedes and Scorpions.
Townend, A.	...	<i>Iychodes</i> ; River Crabs; <i>Pyrophorus</i> .
Vendryes, C.	...	Ticks; Moth, <i>Empyreuma pugione</i> ; Beetle, <i>Stategus titanus</i> .
Verley, L. E.	...	Two live Yellow Snakes, <i>Epicrates inornatus</i> .
Wates, L.	...	Larvæ of Cotton Stainer, <i>Dysdercus andreæ</i> Scale insects.
Williams, J. R.	...	Coll. of Ticks; Caterpillars; Snakes; and Scale insects on Orange Trees.

Donations have also been received from the following :—

Abrahams, R.	Glenpay, A.	McPherson, N.
Alberga, A.	Grant, G.	Morais, G.
Anderson, D.	Greenless, J.	Morin, Miss
Archer, S.	Gruber, J. W.	Morrice, E.
Archer, W.	Gunter, G. C.	Mudon, J.
Atkin, Rev. W. A.	Gunter, L. M.	Muffat, E.
Baines, G. A.	Haity, T. W.	Murdon, T.
Bancroft, E. N.	Hall, Mrs.	Neilson, E.
Bancroft, Miss	Hall, Rev. J. P.	Nelson, E.
Bancroft, J.	Hall, W. A.	Nunes, C.
Barham, E. G.	Hannan, W. B.	Nuttall, E.
Beechum, R. C.	Harrison, Mrs.	Orty, J.
Blackwood, Miss	Henriques, Mrs.	Otter, J.
Boalt, W.	Henriques, A.	Palmer, D.
Bogle, E.	Henriques, N. S.	Palmer, E.
Braham, W. B.	Honiball, R.	Panton, E.
Brandon, J. R.	Hopwood, J. R.	Peck, Mrs. H.
Brown, Mrs. E.	Hunter, G. C.	Pendergast, Leo.
Brown, J.	Husband, A. E.	Pinnock, T. R.
Bryant, R. W.	Ingram, R.	Pendergast, A.
Burgess, Miss	Jackson, A. M.	Preston, J.
Bussell, J. A.	Jackson, J.	Raine, L.
Campbell, D. M.	Johnson, Mrs.	Redwood, J.
Chapman, Miss	Johnson, Miss M.	Roberts, D.
Clarke, J. A. B.	Kennedy, R. H.	Rose, J.
Coombs, J.	Kirkland, N.	Russell, J.
Cover, E. R.	Large, T.	Russell, Rev. T. P.
Cover, W.	Lauten, E. A. F.	Salmon, Miss
Crisp, J. W.	Lefranc, T.	Samuels, V.
Cunha, H.	Leon, A. de	Scott.
Curtis, H.	Lewis, A. M.	Scott, J.
DaCosta, E.	Lewis, J. J. G.	Silvera, E.
DaCosta, M. F.	Lopez, E.	Smith, Miss Una
Dale, W. S.	Lopez, J.	Solomon, Mrs.
Davidson, J.	Lindley, D.	Somers, Rev. T.
Davis, C.	Lindo, G.	Stephen, J.
Dawkins, F.	Linton, A.	Stewart, J.
Delevante, R. A.	Livingston, C.	Strachan, H.
Delfosse, W. L.	Livingston, N.	Sturgeon, Mrs.
Demetrius, W. S.	Livingston, R.	Sturridge, F. B.
Dent, Miss	Lynton, C. E.	Taylor, Miss I.
DeSouza, A.	Lyon, Mrs.	Taylor, Miss N.
Dias, Miss	McFarlane, J.	Taylor, T.
Dikens, O.	Malone, J.	Thompson, E.
Doorley, C.	Marshall, A.	Thompson, R.
Dunn, C. F.	Marshall, E. M.	Tinling, E.
Dupont, Miss	Martin, J.	Trewich, J.
Facey, Mrs.	Maxwell, J.	Victor, H.
Feurtado, O.	May, J. W.	Walter, Miss
Figueroe, J.	McCalla, J.	Ward, J.
Fogarty, R. J.	McClaverty, C.	Watt, J.
Forbes, R. P.	McCrae, J. E.	Wilson, Mrs.
Foster, Ed.	McGahan, M.	Wilson, C.
Fowler, Mrs. A.	McNish, J.	Wilson, R.
Gadpaille, R.	McPherson, J.	Wittingham, E.
Garrelli, W.	Merriam, J.	Wood, Miss
Gayleard, Mrs.		Wynne, B. W.

APPENDIX H.

MUSEUM NOTES.

(Contributed to the *Jamaica Newspapers*.)

The Tumble-Dung Beetle, April, 8th, 1897.

Review. Blackie's Tropical Readers, May, 1st., 1897.

Identification of the Ticks of Jamaica, May, 18th 1897.

“ “ “ Aug. 25th 1897.

Satin Wood, October, 30th 1897.

Water-Striders in Kingston Harbour, December, 2nd 1897.

Indian Calcedony Beads from Colombia, January, 3rd 1898.

The distribution of the Fauna and Flora of Jamaica, Jan., 8th, 1898.

Ticks and Mongoose, Jan., 14th, 1898.

Description of the Jamaica Ticks, Jan., 17th, 1898.

Sea Roaches, Jan., 19th, 1898.

The Tropic Bird, Jan., 21st 1898.

Jamaican Palæontology, Jan., 29th, 1898.

Contribution of the Jamaica Fisheries to Marine Zoology, Feb., 2nd, 1898.

River Crabs, March, 4th, 1898.

Jamaican Pataontology, March, 11th, 1898.

Science, March, 16th, 1898.

A new Indigenous Jamaican Rat, March, 21st 1898.

APPENDIX I.

Return of the Visitors in the Museum for the Year ended 31st March, 1898, month by month compared with those of the two previous years.

—			1897-98.	1896-97.	1895-96.
April	...	...	576	591	410
May	...	...	649	568	592
June	...	...	611	575	332
July	...	...	729	758	376
August	...	...	672	706	531
September	...	...	1,693	785	654
October	...	...	1,518	897	364
November	...	...	1,415	591	593
December	...	...	1,507	275	501
January	...	—	1,378	690	615
February	...	...	1,353	728	538
March	...	...	1,500	731	589
			13,601	7,895	6,095

The first five months are records of those who signed the visitor's book; the last seven being approximately the numbers of visitors to the Museum, as counted by the attendant.

APPENDIX J.

Additions to Art Gallery.

(a.) Jamaica Portrait Gallery.

(81.) Colonel Peter Beckford, Lieutenant-Governor of Jamaica, d. 1710, aged 66

(82.) Ballard Beckford, d. 1764.

(83.) Rev. W. G. Barrett, Missionary, b. 1812, d. 1863.

(84.) Rev. F. Humberstone, Curate of Kingston, b. 1791, d. 1819.

(85.) Admiral Sir John Thomas Duckworth, b. 1747-8, d. 1817.

(b.) Other additions.

Chancellor's Purse, (temp. George III.)

Seal of Jamaica, (temp. George III.)

Seal of the Bahama Islands.

Seal of Bishop Spencer.

Decorations awarded to Mrs. Seacole for services in the Crimea. (*Lent by Miss Grant.*)

Cast of a gold medal struck by the Royal Military Club, Jamaica, in honour of Prince William Henry (William IV), A.D., 1788. (*Presented by Robert Day, Esq., Cork.*)

APPENDIX K.

List of Institutions to which the Journal is sent.

Note—Publications are received in exchange from those Institutions marked with a *

I.—JAMAICA.

Bethlehem, Moravian Training College for Females.

Black River, Young Men's Reading Club.

Fairfield, Moravian Training College for Males.

Hope, St. Andrew, University College.

Kingston, Calabar College.

Kingston, Jamaica Church Theological College.

Kingston, Mico Training College.

* Kingston, Weather Office.

Kingston, Garrison Institute, Up-Park Camp.

Shortwood, St. Andrew, Female Training College.

Montego Bay, Secondary School.

Potsdam School.

Port Royal, Garrison Reading Room.

York Castle, Wesleyan High School.

II.—WEST INDIES.

- Basse-terre, St. Kitts, Botanical Station.
 Berbice, British Guiana, Public Library.
 Bridgetown, Barbados, Botanical Station.
 Castries, St. Lucia, Botanical Station.
 Fort Royal, Martinique, Botanical Station.
 * Georgetown, British Guiana, The Museum.
 " British Guiana, Public Library.
 Grand Turk, Turks Island, Jubilee Library.
 Kingstown, St. Vincent, Botanic Gardens.
 " " Public Library.
 Nassau, New Providence, Public Library.
 Plymouth, Montserrat, Botanical Station.
 * Port of Spain, Trinidad, Botanic Gardens.
 " " Victoria Institute.
 Roseau, Dominica, Botanical Station.
 St. George's, Grenada, Botanic Garden.
 " " Library.
 St. John's, Antigua, Public Library.
 " " Botanical Station.
 " " Society of Agriculture.

III.—THE UNITED KINGDOM.

- Birmingham, The Mason Science College.
 * Kew, Royal Botanic Gardens.
 * London, British Museum, Library.
 " " " (Natural History Branch) Library.
 * " Guildhall Library.
 * " Imperial Institute.
 " Colonial Office Library.
 " Entomological Society of London, Library.
 " Linnean Society, Library.
 " Royal Society, Library.
 " Zoological Society, Library.
 * " Royal Colonial Institute.
 * " Royal Geographical Society.
 " Society of Arts.
 * Newcastle-on-Tyne, Geographical Society.
 Edinburgh, Royal Society of Edinburgh.
 Dublin, Royal Irish Academy.
 * " Royal Dublin Society.

IV.—OTHER EUROPEAN COUNTRIES.

- * Berlin, Germany, Königliche Akademie der Wissenschaften.
 Hamburg, Natural History Museum.
 * Helsingfors, Russia, Societas pro Fauna et Flora Fennica.
 * Modena, Italy, Società dei Naturalisti di Modena.
 * Paris, France, Museum d'Histoire Naturelle.
 * Rome, Accademia dei Lincei.
 Stockholm, Sweden, La Société Entomologique.
 " Royal Academy of Belles Lettres, History and Antiquities.
 * Upsala, University Library.
 Vienna, Zoologische-botanische Gesellschaft.

V.—CANADA.

- Halifax, The Museum.
 * Halifax, The Nova Scotia Institute of Science.
 * Hamilton, The Hamilton Association.
 * Toronto, The Canadian Institute.

VI.—THE UNITED STATES OF AMERICA.

- Boston, National History Society.
 " Public Library.
 * Florida, Department of Agriculture.
 * Massachusetts, Tufts College Library.
 New York, Astor Library.
 " American Museum of National History.
 * North Carolina, Elisha Mitchell Scientific Society.
 * Ohio, State Academy of Science.
 * Philadelphia, American Philosophical Society.
 * Philadelphia, Library of the Academy of Natural Science.

- * Washington, Department of Agriculture.
- “ “ Department of the Interior, Geological Survey.
- * “ Smithsonian Institution.
- * “ U. S. National Museum.
- * “ Bureau of American Ethnology.

VII.—NORTH AMERICA.

Hamilton, Bermuda, Public Library.

VII.—SOUTH AMERICA.

Santiago, Chili, Société Scientifique du Chili.

IX.—AUSTRALIA.

- * Sydney, New South Wales, Department of Mines.
- * “ “ “ Geological Survey.
- * “ “ “ Public Library.
- * “ “ “ Royal Society.

X.—NEW ZEALAND.

- * Wellington, New Zealand Institute.

XI.—INDIA.

Calcutta, The Indian Museum.

XII.—JAPAN.

- * Tokyo, Zoological Society.

APPENDIX L.

Competitions in Literature, Science, Arts and Crafts.

Receipts—				Disbursement—										
	£	s.	d.	£	s.	d.	£	s.	d.					
To Institute Grant	...	20	0	0	Prizes paid in cash	...	33	8	0					
“ Cash Subscriptions to Prize Fund	...	73	17	0	“ Given (see contra)	...	3	10	0					
“ Prizes* to the value of	...	3	10	0	“ Objects purchased	...	62	2	1					
				97	7	0	“ Medals	...	3	2	0			
“ Admission to Concert	...	15	16	0										
“ “ “ Exhibition	...	2	9	0	Concert and Musical Competition	...				18	11	6		
				18	5	0	Printing	...			9	19	0	
							Postage	...			8	2	3	
							Arrangement of Exhibits, &c.	...			7	11	9	
											151	6	7	
							Deduct (net used) Medals	...	2	10	0			
							Prizes	...	20	11	3			
							Lumber	...	2	10	0			
Balance	...			10	3	4					25	11	3	
	</													

* The Organ (value £7 0s. 0d.) offered by Messrs. Mason and Hamlin; and the Music Books (value £1 11s. 6d.) offered by Messrs. Curwen and Sons were not awarded, and were consequently not asked for from those who offered them.

5-8
J A M A I C A.

6510.112

A N N U A L R E P O R T

ON THE

I N S T I T U T E O F J A M A I C A ,

F O R

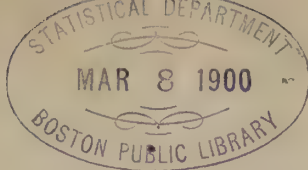
T H E Y E A R E N D E D 31ST M A R C H , 1899.

Ordered by His Excellency the Governor to be Printed.



J A M A I C A :
GOVERNMENT PRINTING OFFICE, 79 DUKE STREET, KINGSTON.

1900.



A N N U A L R E P O R T

ON THE

I N S T I T U T E O F J A M A I C A ,

FOR THE YEAR ENDED 31st MARCH, 1899.

Institute of Jamaica, Kingston, 6th October, 1899.

The Report is arranged under the following heads:—

I. ORGANIZATION.

- (i.) Board of Governors.
- (ii.) Committees.
- (iii.) Executive Staff.
- (iv.) Members.
- (v.) Finance.

II. LITERATURE.

- (vi.) Library
- (vii.) Literature in Country Districts.
- (viii.) Mandeville Branch.

III. SCIENCE.

- (ix.) Museum.
- (x.) Natural Resources and Economic Entomology.
- (xi.) Distribution of Specimens to other Institutions and to Specialists.
- (xii.) Biological Laboratory.
- (xiii.) Original Researches on Jamaica Natural History.
- (xiv.) Museum Notes and Articles.

IV. ART.

- (xv.) Art Gallery.

V. LITERATURE, SCIENCE, AND ART.

- (xvi.) Members Meetings.
- (xvii.) Journal of the Institute.

APPENDIXES.

Appendix A.—Receipts and Disbursements for the year 1898-99 (i.) Vote, (ii.) Private Funds.

Appendix B.—Record of Readers in the Library for the year ending 31st March, 1899, as compared with the five previous years.

Appendix C.—Classified Return of the number of works issued from the Library, during the year ended 31st March, 1899, compared with the five previous years.

Appendix D.—Works presented to the Library, 1898-99.

Appendix E.—Classification of Volumes in the Library on the 31st March, 1899, showing additions made during the year.

Appendix F.—Periodicals and Newspapers on the tables of the Reading Room.

Appendix G.—Additions to the Museum, List of Donors.

Appendix H.—Return of the Visitors in the Museum for the year ended 31st March, 1899, month by month, compared with those of the two previous years.

Appendix I.—List of papers, published during the year, founded either wholly upon material obtained through the assistance of the Institute or containing references to such material.

Appendix J.—Museum Notes contributed to the various Newspapers of the island.

Appendix K.—Additions to the Jamaica Portrait Gallery.

Appendix L.—List of Institutions to which the Journal is sent.

REPORT.

I—ORGANIZATION.

(i.) *Board of Governors.*—During the year, the Hon. James Allwood, Collector-General, resigned his seat on the Board, and the vacancy was filled by the appointment of the Hon. L. J. Bertram, Auditor-General.

(ii.) The following Committees of Members of the Board have been appointed and have met as occasion required.

There have been twelve ordinary meetings and two special meetings of the Board, fourteen Committee Meetings and six Members' Meetings, making a total of thirty-four meetings during the year.

BOARD.				COMMITTEES.			
	Ordinary Meetings.	Special Meetings.	Total Board Meetings.	Library Committee.	Museum Committee.	Members Meetings.	Grand Total of Meetings.
Meetings held ...	12	2	14	5	9	6	34
Hon. S. C. Burke, M.L.C., <i>Chairman of the Board</i> 1898-99 ⁽¹⁾ ...	11	2	13	0	0	1	14
Hon. C. B. Mosse, C.B., C.M.G. ...	7	1	8	.	0	0	8
Wm. Fawcett, Esq., B.Sc., F.L.S. ⁽²⁾ ...	10	2	12	2	3	2	19
J. W. Plaxton, Esq., M.R.C.S., <i>Chairman of the Museum Committee</i> ...	11	2	13	1	8	0	22
Rev. Canon Simms, M. A. ⁽³⁾ ...	9	1	10	2	.	5	17
H. Vendryes, Esq. ...	3	0	3	.	2	1	6
Rev. Wm. Gillies, D.D., <i>Chairman of the Library Committee</i> ...	10	2	12	5	.	6	23
G. C. Henderson, Esq., M.D., Lond. ...	6	2	8	.	4	2	14
Hon. James Allwood ⁽⁴⁾ ...	0	0	0	0	.	0	0
J. Cargill, Esq., M.D. ...	8	2	10	1	2	0	13
His Honour Sir Fielding Clarke ...	4	0	4	0	.	0	4
Hon. L. J. Bertram ⁽⁵⁾ ...	1	0	1	0	.	0	1

(1) Was off the island in August and September.

(2) Was off the island from 3rd to 13th January.

(3) Was off the island from 3rd to 13th January.

(4) Resigned on 1st of July.

(5) Was appointed on 24th August.

(iii) *Executive Staff.*—The Secretary and Librarian was absent from the island on leave, from April 12th to July 29th. During that period the Curator acted as Secretary, and Dr. Gillies, the Chairman of the Library Committee, kindly superintended the affairs of the Library.

(iv) *Membership.*—During the year one honorary and 39 subscribing members have joined and 51 have been removed from the Roll by death, resignation and other causes.

The Roll now stands at—Honorary Members	...	9
Corresponding Members	...	15
Life Members	...	4
Subscribing Members	...	228

Total 256

or 12 less than last year.

(v.) *Finance*.—In Appendix A., is given a statement of the receipts and disbursements of the Institute during the twelve months.

The reduction from £1,979 to £1749 12s. has had an effect on all branches of the Institute. With a decrease in the number of the staff difficulty has been experienced in getting through routine work and development has been retarded. With a smaller grant, fewer books and periodicals have been purchased and a consequent falling off has occurred in both membership of the Institute and attendance of visitors in the public reading room.

II. LITERATURE.

(vi.) *Library*.—In Appendix B is given the number of visitors to the Reading Room of the Library during the year (41,369) which when compared with that of last year (45,274) shows a decrease of 3,905 or 9 per cent. This is the first time in the eight years that a record has been kept that a decrease has had to be recorded. One would almost have expected to find that during a period of depression when many are thrown out of work, the additional visitors to the Reading Room would have more than compensated for the loss which may be put down to a reduction in the number of periodicals placed on the tables.

The largest attendance occurred on Tuesday the 17th of May, when there were 238 readers. The smallest attendance was on Wednesday, the 25th May, a very wet day, when there were only 16 readers.

The total for the month of March was the highest recorded during the year, being however lower than five of the months of the previous year. August and May were the next highest months.

Works issued.—Appendix C gives the number of Works lent out during the year (4,673) which compared with last year (5,260), shows a decrease of 587 volumes borrowed, a result of the falling off in the number of members and the absence of new books of a popular character: too many of the members, apparently, being of the opinion that a book's merit is in direct ratio to its newness.

Additions to the Library.—As will be seen from Appendix D, 188 works have been acquired during the year, 131 by donation and only 57 by purchase: a greater part of the money appearing as expended on books having gone to meet liabilities incurred in previous years. The names of donors are recorded in the appendix: special mention must be made of the donation by the late Colonel Washington Eves of a copy of the first edition of Blome's "History of Jamaica", a very rare work.

The total number of volumes in the Library is 10,586, of which 917 deal exclusively with Jamaica and 592 with the West Indies (other than Jamaica). The classification of the whole library is given in Appendix E.

In Appendix F is given a list of the periodicals and newspapers on the tables of the reading room.

(vii.) *Literature in the Country Districts*.—In the report for last year it was mentioned that a commencement had been made in the direction of extending the advantages of literature to the country parts of the island in a manner simpler than that involved in the formation of branches—i.e. in the form of sets of books of 100 volumes each, at a nominal cost, to the committees of local societies or other responsible persons.

A commencement was made at Black River. During the year sets were also sent to the Young Men's Association at Chapelton and to the Manchioneal Association. These together with two sets at Mandeville, make five sets in circulation. It is intended, as funds permit, to extend the scheme to other parts of the island. All the societies which have had the boxes express satisfaction with the scheme and a desire for its continuance, and there is every evidence that, if the funds at disposal permitted, the acquisition of more such boxes would result in much good throughout the various parishes of the island.

(viii.) *Mandeville Branch*.—Owing to the cessation of the financial grant-in-aid to the Mandeville Branch on the part of the Institute, consequent on the reduction of its own grant, the Branch was removed from the "Bank House" where it had been since its formation, and was placed in a room attached to the Boys' Middle Grade School. The work of attendance was entrusted to the senior boy of the school, under the supervision of the Honorary Secretary, Mr. M. F. Johns; and the public thereby reaps the advantage of the Reading Room being open during the forenoon. The Local Committee has thus been able to bring its expenditure within its income, without further aid from the Institute than is afforded by the supplying of periodicals and the loan of books. There has been no sensible diminution in the number of visitors to the Reading Room since its removal, while the advantages to the boys of the school have much increased. The number of Members of the Branch at the close of the year was 39, and the total number of visitors was 3,221 or an average of 10.59 per day.

In connection with the supply of literature to rural districts, it may be well to note what is being done in Australia. The Public Library of New South Wales recently reported:—"During the past year twenty-five new boxes of books were equipped for loan to country libraries and groups of students, making the total number now available 101; the number of volumes added to the stock was 1,094, making a total of 7,539 * * *. The trustees are of opinion that this branch of their educational work is worthy of every encouragement, and that these boxes have been the means of extending knowledge, intellectual pleasure and brightness to many homes, and of relieving the dreariness and monotony of the lives of many persons living in the remoter parts of the colony; and they would be glad to see the number of boxes largely increased, so that even the remotest villages and groups of settlers and young people growing up on the soil may eventually be reached." May this not also be said of Jamaica?

III.—SCIENCE.

(ix.) *Museum*—(a) *Additions and Arrangements*.—Owing to the reduction in the amount usually available for Museum purposes, it has not been found possible to make purchases of expensive additions or to construct other show-cases, while the lack of a Junior Assistant has rendered it impossible to continue to the degree desirable, the arrangement and labelling for exhibition of the material on hand and constantly accumulating. Much of the Curator's time is taken up in the general conduct of the Museum, and in the examination of, and report upon the specimens constantly being brought or sent to the Institute, mostly of agricultural and economic interest.

Some valuable material, especially in Marine Zoology has, however, been obtained and worked over in the course of the year; and this, when facilities are provided, will be placed on exhibition. A small loggerhead turtle, *Thalassochelys caretta*, has been added to the series of indigenous Chelonia.

A collection of seventy-five Jamaica Bats has been named at the U. S. National Museum, under the direction of Prof. C. H. Merriam. Duplicates were presented to the U. S. National Museum; the remainder, including *Reithronycteris aphylla*, the unique type of a new genus and species described in the "Proceedings of the Academy of Natural Sciences, Philadelphia," 1898, being returned to the Institute's Museum.

Among the special additions may be noted: a live Kinkajou, *Oerolepes caudivolvulus*, from British Honduras, presented by Captain Hill, a pair of live Cuban Coneys, *Capromys*, presented by Mrs. Valdes, and a live Iguana presented by Mr. Leo Verley.

Examples of Aboriginal Indian Remains have been added; but they differ in no respect from the types obtained in considerable numbers during the past two or three years; a typical example of a tripod Indian Mealing-Stone, originally imported from Carthage, now deposited in the Museum, serves for comparison with the several local specimens already obtained.

At his request, jars and preservative fluids have been forwarded to His Honour Mr. F. S. Sanguinetti, Commissioner of the Cayman Islands, with the view of obtaining for the Institute a typical collection of the fauna of this Dependency of Jamaica.

(b.) *Contributions*.—The list of contributions is given in Appendix G. While none is specially noteworthy, the large number shows that the usual interest in the Museum has been maintained. Many are not of much value as additions, but are brought or sent with the object of obtaining information concerning them. The list of additions has been published month by month in the local newspapers.

(c.) *Attendance*.—The Returns of visitors to the Museum for the year is given in Appendix H. The apparent great increase over previous years is due to the different method of registration adopted. Instead of depending upon the signatures of visitors in a visitor's book, a register of attendance is kept by one of the attendants.

(d.) *Live Exhibits*.—No developments of any importance have been possible in this popular section of the Museum work.

Two cages, divided into compartments, have been added for the accommodation of smaller animals, and a high cage for the chicken-hawks.

Amongst others, the collection at present includes an Indian Coney, *Capromys brachyurus*, now rare in Jamaica; and by the side of it is a pair of Cuban Coneys, *Capromys furnierii* (?). The shyness of the one and the amicability of the others are in very marked contrast.

The exhibit of native birds now includes most of those whose habits render them suitable for confinement.

Two yellow snakes *Epicrates inornatus* have been in confinement for nearly two years; they feed readily on live rats. The Iguana from Goat Island, presented by Mr. Leo Verley, is a fine example of the local species. It is growing considerably, as are also the several crocodiles.

Several species of birds and a South American Squirrel have been deposited by Major Crawford, and other rare birds, such as the Mountain Witch, *Geotrygon sylvatica* by Mr. Taylor Domville.

(x.) *Natural Resources and Economic Entomology*.—In a purely agricultural country like Jamaica, considerable attention must necessarily be directed to insect and other pests; while the presence of traces of almost every mineral raises hopes in the inexperienced cultivator of wealth of a more immediate character.

Especially abundant is iron and copper pyrites, but under practically useless conditions; and every few days samples are submitted for examination.

The Institute has advised the Government with regard to the occurrence of ochre and sienna in the island, and on the question of the presence of pearl-bearing molluscs in the surrounding seas. Foreign mining prospectors passing to and from Central America not unfrequently visit the Museum, seeking information on local mining possibilities.

Compared with many other localities, Jamaica suffers comparatively little from insect pests. The very varied altitudes of the land and the varied climatic conditions are no doubt important factors towards this, as is also the scattered character of many of the branches of cultivation. Of pests which have been examined during the year, may be mentioned several kinds of boring beetles, weevils, numerous scale insects, caterpillars of many kinds, aphides and ants. Most of the insect pests received by the Jamaica Agricultural Society are submitted to the Curator for report, and during the year special attention has been paid to the following: weevils destroying sweet potatoes in St. Elizabeth, the insect pests of the Tobacco-plant; "Army-Worm" destroying sugar-canes in St. Ann; and the various pests of the cow-pea.

xi. *Distribution of Specimens to other Institutions and to Specialists*.—Requests are constantly received from workers in various branches of Zoology for Jamaica specimens and material for research. Wherever a knowledge of the local fauna is likely to be advanced by complying with such requests the

Institute is always ready to assist as far as its means will allow, the conditions being that a named series of the different species is returned along with a copy of any publication in which they may be referred to.

Up to the present the Museum has had to limit its own collections mainly to objects of local interest, not being in a position to encourage exchange, except in objects necessary for completing any classificatory series.

The following is a list of the material thus distributed :

Millepora. Preserved in alcohol and in formalin, Prof. Sydney J. Hickson, F.R.S., Owen's College, Manchester. (Preparations of these were exhibited by Prof. Hickson at the Zoological Congress, Cambridge.)

Gephyreans. Dr. H. L. Jameson, Stazione Zoologica, Naples. (Amongst these Dr. Jameson discovered a new species.)

Arenicola Antillensis. Dr. J. H. Ashworth, Owen's College, Manchester.

Steganoporella magnilabris. Mr. S. F. Harmer, F.R.S., Cambridge.

Asteractis expansa, Duerden. Prof. J. P. McMurrich, Michigan.

Collections of named Actiniaria. Prof. A. E. Verrill, New Haven, Conn., U.S.A.

Collections of named Actiniaria and other marine specimens, have also been sent to Prof. G. B. Howes, Royal College of Science, London, Prof. Sydney Hickson, Owen's College, Manchester, Mr. F. S. Harmer, Cambridge Museum, England (per Dr. C. H. Thomson), and the United States National Museum.

Aboriginal Indian Implements. Mr. Robert Burnard, Plymouth Museum, England.

A collection of objects typical of Jamaica Natural History, was arranged for the Hon. G. McGrath, for presentation to the Princethorpe Museum, England,

(xii) *Biological Laboratory*.—Research work has been continued throughout the year in the Biological Laboratory of the Institute, mainly upon the local Zoantharia.

Advantage has been taken of the tropical position of Jamaica to initiate an investigation upon the polyps of corals. During November a marine biological laboratory was established by the Institute at Bluefields, Westmoreland, for the purpose of collecting marine specimens for the Museum and for the observation of others in the living condition. An account of the work carried out will appear in the forthcoming number of the Journal, but the following results may be specially mentioned.

(a) The discovery of the free female Medusoids of *Millepora*.

(b) Evidence of the similarity of the living polyps of the supposed various species of Jamaica *Madrepora*.

(c) The rearing of various larval stages of the Actinian, *Hoplophoria coralligenis*.

(xiii) *Original Researches on Jamaica Natural History*.—The papers, published during the year, given in Appendix I are founded either wholly upon material obtained through the assistance of the Institute or contain references to such material.

Papers connected with the Flora of the Island are recorded in the Bulletin of the Botanical Department, Jamaica.

(xiv) *Museum Notes*.—Museum Notes are contributed from time to time to the local papers, dealing with subjects of importance in local and natural history. The list is given in Appendix J. Other notes upon additions, &c., have also been contributed and serve to maintain an interest in the work of the Institute.

IV.—ART.

(xv.) *Art Gallery*.—In Appendix K is a list of portraits which have been added to the Jamaica Portrait Gallery.

V.—LITERATURE, SCIENCE AND ART.

(xvi) *Members' Meetings*.—During the year six Members' Meeting were held.

The following papers were read :—“The Economic Geology of Jamaica” by F. Nicholas, a corresponding member of the Institute ; “The Higher Education of Women” by Miss Barrows, B.A. ; “The Poets and Nature” by Phil Robinson ; “Gosse and the Natural History of Bluefields” by J. E. Duerden, A.R.C.Sc ; “Agricultural Education in West Indian Schools and Colleges and Elsewhere” by the Revd. Wm. Simms, M.A. ; and “The Mind of the East Indian” by the Rev. John Robson, D.D., of Aberdeen.

A number of chairs, for use of members' meetings and lectures, have been made at the Institute, out of Jamaica mahogany.

(xvii) *Journal*.—Owing in great measure to lack of funds, no number of the Journal has been published during the year : but one is now passing through the press.

In Appendix L is given a list of the Institutions to which the Journal and other publications of the Institute are sent, as issued.

In conclusion, it may be mentioned that the depression in the community of the past two years has made itself felt on the work of the Institute to a greater extent during the past year than during the preceding twelvemonth.

S. CONSTANTINE BURKE, Chairman of the Board, 1898-99.

FRANK CUNDALL, Secretary of the Institute of Jamaica.

APPENDIX A.—INSTITUTE OF JAMAICA.

(i.) VOTE—Receipts and Disbursements for the year 1898-99.

1898-99—1st April.	£	s.	d.	1898-99.	£	s.	d.	£	s.	d.
To Grant	1,749	12	0	By Salaries	1,040	15	4			
...				“ Wages	190	5	2	1,231	0	6
				SERVICES—						
				“ Additions to Library	204	14	11			
				“ Library Expenses and Con-						
				tingencies	32	4	5			
				“ Library Extension to Coun-						
				try Districts	17	11	0			
				“ Additions to Museum and						
				Show Cases	59	6	10			
				“ Museum Expenses and Con-						
				tingencies	21	6	4½			
				“ Additions to Art Gallery	1	13	10½			
				“ Lectures and Premiums	1	15	10½			
				“ Lighting	60	4	0			
				“ Water Rate	5	0	0			
				“ Advertisements	20	9	0			
				“ Printing Reports, &c.	16	16	6			
				“ Postages	12	1	6			
				“ Stationery	31	7	0			
				“ Institute Sundries	27	13	7½			
				“ Latrines	9	0	0	520	15	5
	£1,749	12	0					£1,751	15	11

INSTITUTE OF JAMAICA.

(ii.) PRIVATE FUNDS—Receipts and Disbursements for the year 1898-99.

	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.
To Balance in Bank	77	5	2				By Library Assistant	31	4	0			
“ Balance Petty Cash	8	15	11½	86	1	1½	“ Rebinding Books	23	11	0			
							“ Additions to Library	6	12	0			
“ Members’ Subscriptions 1897	0	10	0				“ Mandeville Branch see con-						
“ “ “ 1898	45	5	0				tra	12	0	0			
“ “ “ 1899	56	0	0	101	15	0	“ Members’ Meeting Report	1	15	0			
							“ Shark Papers Reproduction	4	3	9			
“ Subscriptions for Boxes of Books—							“ Gardener	5	5	0			
Black River	2	10	0				“ Journal	17	3	9			
Chapelton	2	10	6				“ Postages on Journal	2	12	2			
Manchioneal	2	10	0	7	10	6	“ Additions to Art Gallery	3	13	6			
							“ Petty Expenses	0	8	11	108	9	1
“ Donations to Library Fund—													
Sir F. Clarke	1	15	0				“ Balance in Bank	117	16	10	108	9	1
Col. Washington Eves	6	10	0	8	5	0	“ Balance in Hand	0	4	3	118	1	1
“ Mandeville Branch see con-													
tra				12	0	0							
“ Sale of Publications				4	14	11½							
“ Petty Receipts				6	3	7							
	£226	10	2								£226	10	2

APPENDIX B.

Record of Readers in the Library for the year ended 31st March, 1899, as compared with the five previous years.

Month	1898-99.			1897-98.			1896-97.			1895-96.			1894-95.			1893-94.		
	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.
April	1,690	1,776	3,466	1,901	1,887	3,788	1,733	1,149	2,882	1,748	1,266	3,014	1,081	998	2,079	922	606	1,528
May	1,772	1,800	3,572	1,987	1,702	3,689	1,742	1,168	2,910	2,019	1,443	3,462	1,112	982	2,094	963	770	1,733
June	2,048	1,871	3,919	1,899	1,591	3,490	1,624	1,338	2,962	1,728	1,453	3,181	1,146	973	2,119	930	752	1,682
July	1,639	1,762	3,401	2,223	2,049	4,272	1,733	1,449	3,182	1,654	1,447	3,101	1,336	974	2,310	1,029	732	1,761
August	1,800	1,883	3,683	2,253	1,889	4,142	1,860	1,610	3,470	1,473	1,422	2,895	1,330	1,065	2,395	1,178	827	2,005
September	1,785	1,640	3,425	2,213	1,742	3,955	1,687	1,495	3,182	1,782	1,298	3,080	1,273	937	2,210	1,143	830	1,973
October	1,701	1,794	3,495	1,778	1,785	3,563	1,879	1,659	3,538	1,848	1,264	3,112	1,266	1,143	2,409	1,106	837	1,943
November	1,701	1,641	3,342	1,787	1,865	3,652	1,601	1,603	3,204	1,790	1,139	2,929	1,508	1,155	2,663	1,104	839	1,993
December	1,499	1,458	2,957	1,814	1,770	3,584	1,610	1,416	3,026	1,502	1,054	2,556	1,252	931	2,183	1,022	833	1,855
January	1,654	1,545	3,199	2,078	2,113	4,191	1,898	1,728	3,626	1,600	1,122	2,722	1,701	1,311	3,012	1,275	1,002	2,277
February	1,629	1,517	3,146	1,621	1,749	3,370	1,749	1,709	3,458	1,713	1,210	2,923	1,791	1,132	2,923	1,064	947	2,011
March	2,032	1,732	3,764	1,710	1,868	3,578	2,022	2,111	4,133	1,498	926	*1,424	2,065	1,339	3,404	1,252	1,118	2,340
	20,950	20,419	41,369	23,264	22,010	45,274	21,138	18,435	39,573	20,355	15,044	35,399	16,861	12,940	29,801	13,048	10,053	23,101

*Closed for 5 afternoons and 3 whole days.
† “ 2 Public Holidays.
† “ 2 days for alterations.

Totals

1898-99
1897-98
1896-97
1895-96
1894-95
1893-94

...
...
...
...
...
...

41,369
45,274
39,573
35,399
29,801
23,101

COMPARISON.

1898-99
1897-98

...
...

41,369
45,274

Decrease
3,905 or 9 per cent
under last year.

APPENDIX C.

Classified Return of the number of Works issued from the Library during the year ended 31st March, 1899 compared with the return for the five previous years

Number of Borrowers	1898-99.		1897-98.		1896-97.		1895-96.		1894-95.		1893-94.	
	218		234		289		272		288		237	
	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.	Books Borrowed.	Percentage.
Theology, Philosophy, &c. ...	50	1.07	34	.65	79	1.25	78	1.27	84	1.36	110	1.84
History, Biography, Travels, &c. ...	432	9.25	484	9.20	560	8.83	398	6.47	545	8.83	529	8.86
Law, Politics, Sociology, &c. ...	45	.96	81	1.54	70	1.10	52	0.85	43	0.70	35	0.58
Art, Science, Natural History ...	161	3.45	229	4.35	310	4.89	276	4.49	269	4.36	340	5.69
Poetry and Drama ...	106	2.27	113	2.15	90	1.42	66	1.07	59	0.95	79	1.32
Prose Fiction ...	1,589	34.00	2,254	42.85	2,550	40.20	2,193	35.66	2,476	40.10	2,897	48.52
Miscellaneous ...	144	3.08	120	2.28	108	1.70	87	1.41	131	2.12	89	1.49
Periodicals ...	2,033	43.50	1,851	35.19	2,499	39.40	2,916	47.41	2,435	39.43	1,798	30.11
West India ...	113	2.42	94	1.79	77	1.21	84	1.37	133	2.15	94	1.59
	4,673	100.00	5,260	100.00	6,343	100.00	6,150	100.00	6,175	100.00	5,971	100.00
Comparison	...				1897-98				5,260			
"	...				1898-99				4,673			
		Decrease									587	

APPENDIX D.

WORKS PRESENTED TO THE LIBRARY 1898-'99.

Bound Volumes presented

	Vols.		Vols.
Smithsonian Institution	18	Messrs. Cassell & Co.	1
British Museum	1	Messrs. DeCordova & Co.	2
Colonial Secretary	23	Royal Colonial Institute	1
Missouri Botanical Garden	2	U. S. Commissioner of Education	1
U. S. Geological Survey	16	James Gall, Esq.	1
E. B. Lynch, Esq.,	2	Mrs. Anderson	14
Rev. Wm. Gillies, D. D.	6	U. S. Department of Agriculture	2
U. S. National Museum	4	E. Richardson, Esq.	1
U. S. Consul	9	Rev. J. Watson	1
Dr. I. Anderson	2	H. Vincent, Esq.	1
T. Haliburton, Esq.	1	F. B. Sturridge, Esq.	18
Volta Bureau	1	C. E. Isaacs, Esq.	1
American Museum of Natural History	1	C. Washington Eves, Esq., C. M. G.	1

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Pamphlets, &c., presented.

	Vols.		Vols.
J. Rodway, Esq.	1	Peabody Museum	1
Botanical Gardens, Trinidad	3	Smithsonian Institution	5
New Zealand Institute	1	Michigan Board of Agriculture	9
American Museum of Natural History	12	Dr. Lintner	1
Museum of Natural History, Buenos Ayres	1	Jewish Historical Society	1
Nova Scotia Institute	1	Colonial Secretary	421
Indiana Academy of Science	4	Prof. F. W. Putnam	1
Hamburgh Society of Natural History	1	Canadian Institute	1
Emigrants' Information Office	1	Milwaukee Public Library	1
Queen's College, Manchester	2	" " Museum	1
Institute of Hygiene, Chili	8	Musée d'Histoire Naturelle, Paris	15
James Gall, Esq.	4	New York Public Library	21
Hatch Experiment Station	1	J. E. Duerden, Esq.	2
Rhode Island College of Agriculture	2	U. S. Department of Agriculture	8
Cincinnati Society of Natural History	53	G. F. Judah, Esq.	1
American Entomological Society	4	J. H. Hart, Esq.	1
Meriden Scientific Association	1	Australian Chamber of Commerce	1
Tufts College	1	Boston Society of Natural History	5

	Vols		Vols.
Boston Public Library	1	F. Sheppard, Esq.	3
Frank Cundall, Esq.	1	Dr. H. Roedel	1
American Philosophical Society	3	British Columbia Board of Trade	2
International Congress on Technical Education	1	Wyoming Experiment Station	1
Francis Watts, Esq.	1	Volta Bureau	1
J. T. Rea, Esq.	1	St. Louis Academy of Science	1
Antiquarian Society, Stockholm	29	New South Wales Government	5
University of Upsala	1	" " " Department of Mines	1
Jamaica Society of Agriculture and Commerce	1	Royal Society of New South Wales	1
Hamilton Public Library	1		
		Total	653

SUMMARY.

Bound Volumes presented	...	131
Pamphlets, &c. "	...	653
Volumes purchased	...	57
Pamphlets "	...	—

APPENDIX E.

Classification of Volumes in the Library of the Institute of Jamaica on the 31st of March, 1899, showing the additions catalogued during the year.

		No. on 31st March, 1898.	No. added during year 1898-99.	Total.
Ia.	Jamaica	885	51	936
Ib.	West Indies	571	42	613
Ic.	West Africa	18	...	18
IIa.	Theology	293	1	294
IIb.	Philosophy	219	...	219
IIIa.	History	1,428	2	1,430
IIIb.	Biography	1,044	10	1,054
IIIc.	Travels	597	3	600
IVa.	Law, Politics, Sociology	398	11	409
IVb.	Education	276	5	281
Va.	Art	201	...	201
Vb.	Science and Natural History	1,341	10	1,351
VI	Poetry and the Drama	297	..	297
VII	Linguistics and Philology	85	...	85
VIII	Prose Fiction	1,327	...	1,327
IX	Miscellaneous	603	3	606
X	Dictionaries and Works of Reference	403	10	413
XI	Reports of Societies	469	40	509
		10,455	188	10,643

APPENDIX F.

Periodicals and Newspapers on the Tables of the Reading Room.

Agricultural Gazette, New South Wales	Cassell's Saturday Magazine
Annals and Magazine of Natural History	Catholic Opinion (Jamaica)
Army List	Century Magazine
Art Journal	Chamber of Commerce Journal
Athenæum	Chamber's Journal
Blackwood's Magazine	Choir Leader (Jamaica)
Book News	Colonies and India
British Trade Journal	Commerce
Budget (Jamaica)	Commercial Intelligence
Builder	Contemporary Review
Bulletin of the Botanical Department (Jamaica)	Cornwall Herald (Jamaica)
Bulletin of the Torey Botanical Club	Cornwall Times (Jamaica)

Daily Mail	Literary World
Edinburgh Review	Macmillan's Magazine
Engineering	Magazine of Art
English Illustrated Magazine	Methodist Messenger (Jamaica)
English Mechanic	Musical Herald
European Mail	Natural Science
Farm Poultry	Nature
Field	Navy List
Fortnightly Review	New York Herald
Gall's News Letter (Jamaica)	Niger and Yoruba Notes
Gardener's Chronicle	Nineteenth Century
Gardner's Monthly (Jamaica)	Nineteenth Century (Jamaica)
Gentlewoman, The	North American Review
Geographical Journal	Odd Fellows Magazine
Graphic	Portland Gazette (Jamaica)
Gleaner (Jamaica)	Presbyterian (Jamaica)
Harper's Magazine	Proceedings of the Zoological Society
Home Art Work	Public Opinion
Illustrated London News	Publishers Circular
Jamaica Advocate	Punch
Jamaica Baptist Reporter	Queen
Jamaica Churchman	Review of Reviews
Jamaica Gazette	Revue Générale des Sciences
Jamaica Post	Revue des Deux Mondes
Jamaica Teacher	Saturday Review
Jamaica Telegraph	Scientific American
Jamaica Times	" " Supplement and Building
Jamaica Weather Report	Edition
Johns Hopkins University Circulars	Scribner's Magazine
Journal of the Board of Agriculture	Spectator
Journal of the Imperial Institute	Strand Magazine
Journal of the Institute of Jamaica	Sugar Cane
Journal of the Jamaica Agricultural Society	Timehri (British Guiana)
Journal of the Microscopical Society	Times (London) Daily
Kew Bulletin	" " Weekly
Leisure Hour	Tropical Agriculturist
Library Association Record	West Indian and Commercial Advertiser

APPENDIX G.

Additions to the Museum.

LIST OF DONORS.

Aguilar, F.	...	Centepede; sea horse, <i>Hippocampus</i> ; scorpions, <i>Isometrus maculatus</i> .
Bachelor, T. C. A.	...	Two dragonflies. <i>Gynacantha nervosa</i> and <i>Irithemis ambrata</i> .
Baxter, Captain	...	Mineral ores; ticks
Bovell, C. P.	...	Beetle, <i>Belostoma grandis</i> ; trap-door spider; embryo sharks.
Brookes, W.	...	Cranium, jaws, and vertebral column of shark.
Calder, J. V.	...	Beetle attacking sweet potatoes.
Caldwell, J.	...	Auriferous sulphite of antimony from Peru.
Cargill, Dr.	...	Collection of spiders, scorpions, &c.
Caribbean Sea Fisheries	...	Collection of sponges, anemones, acyonarians, and corals.
Development Syndicate	...	
Castle, Mrs.	...	Plated headed lizard, <i>Xiphocercus valenciennesi</i> .
Charnock, J.	...	Objects of historic interest from Cuba.
Clarke, Hon. J. P.	...	Collection of Jamaica gold ore.
Coles, Rev. C. H.	...	Earwig, <i>Forficula americana</i> .
Cradwick, W.	...	Live land shell, <i>Orthalicus</i> .
Craig, R.	...	Collection of Caterpillars and moths destroying tobacco plants.
Crawford, Major	...	Beetle, <i>Sternodontes damicornis</i> . Live Mexican squirrel and birds deposited.
Delgado, G.	...	Live mongoose, <i>Herpestes</i> .
Domville, R. Taylor	...	Numerous live birds presented and deposited.
Dowding, Commodore	...	Clay pipes, coins, and vessels from excavations at Port Royal.
Duff, G. M.	...	Scale Insect, <i>Icerya roseae</i> .
Fawcett, W.	...	Cicada septendecim, and Dragon fly, <i>Myrmeleon</i> , and other insects.
Francis, L.	...	Hermit crab, <i>Petrochirus bahamensis</i> with adhering sea-anemones, <i>Adamsia tricolor</i> .
Fryer, J.	...	Indian mealing stone (Deposited.)
Gall, Mrs.	...	Live mongoose, <i>Herpestes</i> , etc.
Gray, Miss B.	...	Collection of Spanish and French coins.

Gray, F. M.	...	Beetle. <i>Præpodes vittatus</i> and <i>Pachnecmus letus</i> .
Hall, Mrs.	...	Live spotted chinned snake, <i>Liophis callilæmus</i> ; teeth of whale, &c.
Harris, Miss M.	...	Various stick insects.
Hart, A. J.	...	Various collections of Insects, &c
Hart, F.	...	<i>Pericera cornuta</i> with sponges and <i>Adamsia tricolor</i> attached.
Hemming, G. N.	...	Stick and leaf insect. Two-headed snake, <i>Typhlops lumbricalis</i> .
Henderson, Dr. G. C.	...	Bat, Insects, &c.
Hill, Capt.	...	Night walker, <i>Ceroleptes caudivolvulus</i> .
Holbrook, F. M. (New York)	...	Various American turtle-shells.
Holwell, Mrs.	...	Live chicken hawk, <i>Buteo borealis</i> .
Jamaica Agricultural Society, } per G. A. Douet		Various agricultural insect pests.
Judah, G. F.	...	Collection of moths and other insects.
King, F	...	Yellow snake, <i>Epicrates inornatus</i> .
Lawten, E. A.	...	Collection of insects; scorpion, <i>Centruurus margaritatus</i> ; Beetle, <i>Sternodontes damicornis</i> ; spider; longicorn beetle.
Lindo, A. S.	...	Beetle, <i>Sternodontes damicornis</i> .
Lindo, U.	...	Live nudibranch, <i>Aclesia intrapicta</i> .
McHugh and Simons, D.	...	Spinous crab, <i>Pericera cornuta</i> , with sea-anemones, <i>Adamsia tricolor</i> ; sea-horse, <i>Hippocampus guttulatus</i>
McLeod, Rev. N.	...	Fossil Astrean coral.
Mitchell, Hon. J. H.	...	Calcareous stones resembling vertebrae.
Nicholas, J. C.	...	Land crabs, <i>Cænobita diogenes</i> and <i>Excarciivius ruricola</i> from Central America
Nuttall, Miss	...	Nest of tent moth
Pearson, F. S.	...	Pair of live chicken hawks, <i>Buteo borealis</i>
Philibert. R.	...	Spinous crab, <i>Pericera cornuta</i> , with commensal anemone. <i>Adamsia tricolor</i> .
Pinnock, Col. A. H.	...	Earwig, <i>Forficcesila americana</i> ; scale insects and fungus.
Scotland, Rev. H.	...	Photograph of bell, Port Royal; collections of minerals, &c.
Sheridan, H.	...	Live soldier crabs, <i>Cænobita diogenes</i> .
Smith, Miss J.	...	Collection of land shells
Solomon, G.	...	Collection of minerals
Soutar, E. D.	...	Two headed snake, <i>Typhlops lumbricalis</i> , and minerals
Streadwick, J.	...	Spotted chinned snake; <i>Liophis callilæmus</i>
Sullivan, M. A.	...	Spider, <i>Nephila clavipes</i>
Thomas, H.	...	Pipe fish, <i>Synathus</i>
Thomas, J.	...	Collection of butterflies; <i>Helicornis charithorna</i>
Tomlinson, K. R.	...	Collection of moths
Vancuylenburg, J. W. A.	...	Trumpet fish, &c.
Vendryes, C. L.	...	Water beetle, <i>Hydrophilus</i>
Vendryes, P. E.	...	Beetle, <i>Strategeus titanus</i>
Verley, Leo	...	Live Iguana, <i>Cyclura carinata</i>
Williams, Mrs. S.	...	Spotted chinned snake, <i>Liophis Callilæmus</i>
Willis, L. D.	...	Live Sea basket, <i>Astrophyton muricatum</i>

Donations have also been received from the following :—

Abrahams, R.	Carter, A.	Earl, R.
Almiral, S.	Catheart, A.	Elliott, Miss K.
Armstrong, Miss	Clarke, Mrs.	Facey, J.
Ayton, J.	Claypole, G.	Fitzherbert, G. W.
Bachelor, A. L.	Cohen, Miss G.	Foster, E.
Baillie, W. V.	Cole, G. A.	Fowler, W. A. T.
Bancroft, Miss C.	Conrad, H.	Fraser, J.
Barclay, J.	Cork, H.	Gall, J.
Batchelor, T. C. A.	Con, Mrs	Geddes, Miss M. A.
Belone, P.	Cripps, T.	Gully, A.
Braham, W. B.	DaCosta, E. C.	Hall, W. H.
Bramwell, A.	Daly, J.	Hart, J. A.
Breakspare, F.	Davidson, J.	Hart, M. A. J.
Bruford, Miss	Delfosse, W. F.	Hay, R. A.
Burgess, B. A.	Demetrius, W. F.	Hedges, J. H.
Burke, C. S.	DePass, C. L.	Hendricks, H.
Burke, J. M.	DePass, M.	Henry, W. S.
Calder, J.	Dewdney, A. J.	Hinson, W. H.
Comeron, S. A. B.	Doran, G.	Husband, Rev. A. E.
Campbell, J. S.	Drummond, W. E.	Isaacs, K. H.
Campbell, C.	Dunn, T.	Jackson, T.
Carr, W. G.	Duperly, A.	Jameson, S.
Carter, H.	Durant, C.	Johnson, R.
Carty, J.	Earle, E.	Joseph, H.

Kemp, I.
Kerr, A. L.
Lawes, H.
Lehmkuhl, P.
Levy, E. L.
Levy, J.
Lewis, H.
Lindo, H.
Lindo, V.
Lucie Smith, D & E.
McGahan, S.
McKenzie, H.
McLean, J.
McNish, T.
Melbourne, Q.
Mehado, C.
Mendez, A.
Minot, T.
Mitchell, R.
Morrison, Miss S.
Moxsy S.

Mudon, J.
Mullings, J.
O'Meally, Mrs.
Peart, A.
Phipps, P.
Pickford, B. F.
Pinnock, Mrs. A. H.
Powell, E.
Reynolds Rev. C.
Richards, R.
Riley, J.
Robeiro, Mrs.
Robertson, R. H.
Rogers, Sergt.
Royes, R.
Rouse, H. H.
Savage, A. L.
Savage, T. A. A.
Savariau, Miss M. S.
Scott, C. A.
Scott, T. M.

Sewell, H.
Sinclair, D. J.
Smith, C. J.
Smith, G. B.
Smith, W. K.
Sorapure, G.
Spalding, M.
Stephens, J.
Stevenson, R.
Stewart, J. G.
Thompson, S.
Thompson Miss
Vipond, T. J.
Virtue, C. M.
Whiting, Conway
Whitehorne, E.
Williams, Mrs
Williams, W. D.
Williams, J.
Wilson, J.
Wong Sam, A.

APPENDIX H.

Return showing the number of Visitors to the Museum for the year ended 31st March, 1899, month by month, compared with those of the two previous years.

			1898-99.	1897-98.	1896-97.
April	...	...	1,255	576	591
May	...	...	1,703	649	568
June	...	...	2,075	611	575
July	...	...	2,249	729	758
August	...	...	2,179	672	706
September	...	...	1,779	1,693	785
October	...	...	1,426	1,518	897
November	...	...	1,757	1,415	591
December	...	...	1,559	1,507	275
January	...	...	1,882	1,378	690
February	...	...	2,017	1,353	728
March	...	...	2,089	1,500	731
			21,970	13,601	7,895

APPENDIX I.

The following papers published during the year are founded either wholly upon material obtained through the assistance of the Institute or contain references to such material:

"Jamaica Fisheries—The Operations in Jamaica of the Caribbean Sea Fisheries Development Syndicate, Ltd." By J. E. Duerden. The Daily Gleaner, Kingston, April 16, 1898.

Jamaican Actiniaria, I. Zoanthæ. By J. E. Duerden. Transactions of the Royal Dublin Society, Vol. VI. Ser. II, April 1898.

"A new Marine Hydrometrid." By G. H. Carpenter, B.Sc., F.E.S. The Entomologists Monthly Magazine April, 1898.

"Trochopus and Rhagovelina." By G. H. Carpenter, B.Sc., F.E.S. The Entomologists Monthly Magazine, May 1898.

"On the Relations of certain Stichodactylinae to the Madreporaria." By J. E. Duerden. Journal of the Linnean Society, Vol. XXVI.

"Descriptions of Five new Phyllosome Bats." By Gerrit S. Miller, Jr. Proceedings of the Academy of Natural Science, Philadelphia 1898.

"Descriptions of imperfectly known and new Actinians, with critical notes on other species, III." By A. E. Verrill. The American Journal of Science, Vol. III., 1899.

"On the species of the Genus *Millepora*: a preliminary Communication." By Sydney J. Hickson, M.A., D.Sc., F.R.S. Proceedings Zoological Society of London, April, 1898.

"Report on the Actinaria collected by the Bahama Expedition of the State University of Iowa, 1893." By Dr. J. Playfair McMurrich. Bulletin of the State University of Iowa, June, 1898.

The following papers also refer to specimens collected in Jamaica:—

- "Cubomedusæ." By Franklin Story Conant. *Memoirs Biological Laboratory*, Johns Hopkins University, Vol. IV., Part I.
- "Zoological Jamaica." By Dr. H. L. Clark. *Natural Science*, Sept., 1898.
- "The Echinoids and Asteroids of Jamaica." By Hubert Lyman Clark, John Hopkins University Circulars, Nov., 1898.
- "Embryology of *Ophiscoma echinata*, Agassiz. Preliminary note by Caswell Grave. Ibid.
- "Notes on the Ophuirids collected in Jamaica during June and July 1897." By Caswell Grave. Ibid.
- "On some Aquatic Phynchota from Jamaica." By G. W. Kirkalady. *The Entomologist*, Feb. 1899.
- "A new species of *Sphænogona* from Jamaica. By Percy J. Lathy. *The Entomologists Monthly Magazine*, Sept., 1898.
- "Note on Three Pyralid moths of the genus *Pachyzanca*." By T. D. C. Cockerell, Poyce, Nov., 1898.
- "A collection of Fishes made by Joseph Seed Roberts in Kingston, Jamaica." By David S. Jordan and Cloudsley Butler. *Proceedings of the Academy of Natural Sciences of Philadelphia* 1897, [received 1898].

APPENDIX J.

Museum Notes.

(Contributed to the Jamaica Newspapers).

- "Gold in Jamaica," April 13, 1898.
- "Gold and Jamaica Economic Geology," April 26th, 1898.
- "Some recent additions to the Museum, the nightwalker, Indian mealing-stone, yellow-snakes, the macaw," June 10, 1898.
- "Identification of the nightwalker, *Ceroleptes caudivolvulus*," June 16th, 1898.
- "Contributions to the fishes of Jamaica," June 18th, 1898.
- "Recent contributions to the Natural History of the Island: (1) Geology; (2) Fossils; (3) Entomology; (4) Crabs and Stomatopods; (5) Fishes; (6) Star-fishes, Sea-urchins, and Sea-cucumbers; (7) Zoophytes; (8) Geographical distribution," July 16th, 1898.
- "A plea for the yellow-snake," August 2nd, 1898.
- "Addition of an Indian Coney," August 22nd, 1898.
- "The sweet-potato disease," October 6th, 1898.
- "A new species of *sphænogona* from Jamaica," October 14th, 1898.
- "The cow-pea and its insect pest," December 10th, 1898.
- "Interesting case in the distribution of Jamaica scorpions," December 23rd, 1898.
- "The bats of Jamaica," January 3rd, 1899.
- "Aphides attacking grape vines," January 3rd, 1899.
- "Gosse and the natural history of Bluefields: collections; the naturalists sojourn in Jamaica; birds of Jamaica; Gosse's influence on the study of natural history in Jamaica; Bluefields of 1844 compared with its condition to-day; the polyps of *madrepora*; search for the polyps and medusoids of *millepora*," December 17th, et seq.

APPENDIX K.

Additions to Jamaica Portrait Gallery.

- (86.) Sir Anthony Shirley (b. 1565, d. after 1635).
- (87.) Sir George Nugent (b. 1757, d. 1849).
- (88.) Maria, Lady Nugent (d. 1834).
- (89.) Sir Edward Newton (b. 1832, d. 1897).
- (90.) Sir Henry Thomas de la Beche (b. 1796, d. 1855).
- (91.) Lord Collingwood (b. 1750, d. 1810).
- (92.) Olof Swartz (b. 1760, d. 1818).
- (93.) Sir Hyde Parker (b. 1739, d. 1807).
- (94.) Teresia Constantia Phillips (b. 1708-9, d. 1765).

APPENDIX L.

List of Institutions to which the Journal is sent.

Note.—Publications are received in exchange from those Institutions marked with an *

I.—JAMAICA.

- Bethlehem, Moravian Training College for Females.
- Black River, Young Men's Reading Club.
- Fairfield, Moravian Training College for Males.
- Hope, St. Andrew, University College.
- Kingston Calabar College.
- Kingston, Jamaica Church Theological College.
- Kingston, Mico Training College.
- * Kingston, Weather Office.
- Kingston, Garrison Institute, Up-Park Camp
- Shortwood, St. Andrew, Female Training College.
- Montego Bay, Secondary School.
- Potsdam School.
- Port Royal, Garrison Reading Room.
- York Castle, Wesleyan High School.

II. WEST INDIES.

- Basse-terre, St. Kitt's, Botanical Station.
 Berbice, British Guiana, Public Library.
 Bridgetown, Barbados, Botanical Station.
 Castries, St. Lucia, Botanical Station.
 Fort Royal, Martinique, Botanical Station.
 * Georgetown, British Guiana, The Museum.
 " British Guiana, Public Library.
 Grand Turk, Turks Island, Jubilee Library.
 Kingstown, St. Vincent, Botanic Gardens.
 " " , Public Library.
 Nassau, New Providence, Public Library.
 Plymouth, Montserrat, Botanical Station.
 * Port-of-Spain, Trinidad, Botanic Gardens.
 " " , Victoria Institute.
 Roseau, Dominica, Botanical Station.
 St. George's, Grenada, Botanic Garden.
 " " , Library.
 St. John's Antigua, Public Library.
 " " , Botanical Station.
 " " , Society of Agriculture.

III.—THE UNITED KINGDOM.

- Birmingham, The Mason Science College.
 * Kew, Royal Botanic Gardens.
 * London, British Museum, Library.
 * “ “ “ (Natural History Branch) Library.
 “ Colonial Office Library.
 “ Entomological Society of London, Library.
 * Guildhall Library.
 * Imperial Institute
 * Linnean Society, Library.
 “ Royal Society, Library.
 * Royal Colonial Institute.
 * Royal Geographical Society.
 “ Society of Arts
 * Zoological Society, Library.
 * Newcastle-on-Tyne, Geographical Society.
 Edinburgh, Royal Society of Edinburgh.
 Dublin, Royal Irish Academy.
 * “ Royal Dublin Society.

IV.—OTHER EUROPEAN COUNTRIES.

- * Berlin, Germany, Königliche Academie der Wissenschaften.
Hamburgh, Natural History Museum.
* Helsingfors, Russia, Societas pro Fauna et Flora Fennica.
* Modena, Italy, Società dei Naturalisti di Modena
* Paris, France, Musée d' Histoire Naturelle.
* Rome, Accademia dei Lincei.
Stockholm, Sweden, La Société Entomologique.
* Stockholm, Royal Academy of Belles Lettres, History and Antiquities.
* Upsala, University Library.
Vienna, Zoologische-botanische Gesellschaft.

V.—CANADA.

- Halifax, The Museum.
 * The Nova Scotia Institute of Science.
 * Hamilton, The Hamilton Association.
 * Toronto, Astronomical and Physical Society.
 * The Canadian Institute.

VI.—THE UNITED STATES OF AMERICA

- Boston, National History Society.
 " Public Library.
 * Cincinnati, Society of Natural History.
 * Florida, Department of Agriculture.
 * Kansas University.
 * Massachusetts, Tufts College Library.
 * New Hampshire, State Library, Concord.
 * New York, Astor Library.
 * New York, American Museum of Natural History.
 * North Carolina, Elisha Mitchell Scientific Society.

- * Ohio, State Academy of Science.
- * Philadelphia, University of Pennsylvania.
- * " American Philosophical Society.
- * " Library of the Academy of Natural Science.
- * " Commercial Museum.
- * Washington, Department of Agriculture.
- * " Department of the Interior Geological Survey.
- * " Library of Congress.
- * " Smithsonian Institution.
- * " U. S. National Museum.
- * " Bureau of American Ethnology.

VII.—NORTH AMERICA.

Hamilton, Bermuda, Public Library.

VIII.—SOUTH AMERICA.

Santiago, Chili, Société Scientifique du Chili.

IX.—AUSTRALIA.

- * Sydney, New South Wales, Department of Mines.
- * " " " " Geological Survey.
- * " " " " Public Library.
- * " " " " Royal Society.

X.—NEW ZEALAND.

- * Wellington, New Zealand Institute.

XI.—INDIA.

Calcutta, the Indian Museum.

XII.—JAPAN.

- * Tokyo, Zoological Society.

XIII.—PUBLICATIONS.

- * Paris—Revue Générale des Sciences.
- * Washington—The American Microscopical Journal.

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JAMAICA.

ANNUAL REPORT

ON THE

INSTITUTE OF JAMAICA,

FOR

THE YEAR ENDED 31ST MARCH, 1901.

Ordered by His Excellency the Governor to be Printed.



J A M A I C A :

GOVERNMENT PRINTING OFFICE 79 DUKE STREET, KINGSTON.

1901

ANNUAL REPORT

ON THE

INSTITUTE OF JAMAICA,

FOR THE YEAR ENDED 31st MARCH, 1901.



Institute of Jamaica, 4th June, 1901.

THE Report is arranged under the following heads:—

I. ORGANIZATION—

- (i.) Board of Governors.
- (ii.) Committees.
- (iii.) Executive Staff.
- (iv.) Members.
- (v.) Finance.

II. LITERATURE.

- (vi.) Library.
- (vii.) Literature in Country Districts.
- (viii.) Mandeville Branch.
- (ix.) Members Room.
- (x.) Publications.

III. SCIENCE.

- (xi.) Museum.
- (xii.) Museum Notes and Articles

IV. ART.

- (xiii.) Art Gallery.

V. LITERATURE, SCIENCE AND ART

- (xiv.) Members Meetings.
- (xv.) Miscellaneous.
- (xvi.) Retrenchment.

APPENDICES.

Appendix A.—Receipts and Disbursements for the year, 1900-1901. (i.) Vote. (ii.) Private Funds.

Appendix B.—Record of Readers in the Library for the year ended 31st March, 1901, as compared with the five previous years.

Appendix C.—Works presented to the Library, 1900-1901.

Appendix D.—Classification of Volumes in the Library on the 31st March, 1901, showing additions made during the year.

Appendix E.—Classified return of the number of works issued from the Library, during the year ended 31st March, 1901, compared with the five previous years.

Appendix F.—Periodicals and Newspapers in the Library.

Appendix G.—Additions to the Museum—List of Donors.

Appendix H.—Museum Notes contributed to the various Newspapers of the Island.
Appendix I.—Additions to the Jamaica Portrait Gallery.

REPORT.

I.—ORGANIZATION.

(i.) *Board of Governors.*—In the early part of the year the Board suffered serious losses in the deaths of Dr. Cargill, who had been for some years a member, and the previous year Chairman, and the Hon. Samuel Constantine Burke, who had been for upwards of seven years a member, and for two years Chairman of the Board. The vacancies thus arising were filled by the appointments to seats on the Board of the Hon. Sydney Olivier, C.M.G., and Mr. Archibald Munro.

(ii.) *Committees.*—The following Committees have been appointed, and have met as occasion required :—

	Board.			Committees.		Members' Meetings.	Grand Total of Meetings.
	Ordinary Meetings.	Special Meetings.	Total Board Meetings.	Library Committee.	Museum Committee.		
Meetings held ...	12	2	14	4	11	8	37
His Honour Sir Fielding Clarke, <i>Chairman of the Board</i> , 1900-1901 ...	11	2	13	3	1	1	18
Hon. C. B. Mosse, C.B., C.M.G. ¹ ...	5	0	5	.	.	0	5
Hon. Wm. Fawcett, B.Sc., F.L.S. ² ...	4	0	4	0	2	4	10
J. W. Plaxton, Esq., M.R.C.S., <i>Chairman of the Museum Committee</i> , 1900-1901 ...	5	2	7	.	10	1	18
Rev. Canon Simms, M.A., <i>Chairman of the Library Committee</i> , 1900-1901 ³ ...	9	2	11	4	.	7	22
H. Vendryes, Esq. ...	5	1	6	.	3	1	10
Rev. Wm. Gillies, D.D. ...	10	2	12	4	.	0	16
G. C. Henderson, Esq., M.D., Lond. ...	10	2	12	.	4	2	18
Hon. L. J. Bertram ...	5	2	7	2	1	1	11
Hon. Sydney Olivier, C.M.G. ⁴ ...	3	2	5	0	.	1	6
Archibald Munro, Esq. ⁵ ...	5	2	7	.	.	0	7

1 Absent from the Island from June 27—December 27.

2 " " " May 22—Nov. 30, and Jan. 1-11.

3 " " " January 1-11.

4 " " " November 20—January 11.

5 " " " July 3—September 13.

(iii) *Executive Staff.*—The Curator was on leave of absence from the 1st of April to the 29th of June, during which time Mr. John R. Scotland was in temporary charge of the Museum under the direct control of the Secretary of the Institute.

From the 3rd of July to the 22nd October the Secretary and Librarian was on leave of absence. During that period the duties of the Secretary were performed by the Curator, while the Chairman of the Library Committee kindly superintended the affairs of the Library.

Mrs. Beer, the Assistant to the Curator, terminated her engagement on the 6th October—after a period of 4½ years service, and Mr. J. R. Scotland left the service of the Institute on the 1st August, 1900.

Mr. Jacobs was engaged as Assistant to the Curator on the 22nd October, 1900, but, owing to the announced reduction in the forthcoming year, his services were dispensed with on the 31st of March.

Owing to the need for retrenchment alluded to, Dr. Duerden's official position at the Museum ceased on the 31st of March.

The Board would take this opportunity of testifying to the excellent work performed by Dr. Duerden while he has held the office of Curator of the Museum of the Institute.

Dr. Duerden entered on his duties on the 12th of March, 1895, and during his tenure of office the objects in the Museum have been re-arranged, and, in part, re-labelled in a new building erected for their reception shortly after his arrival, on which occasion he organized an Exhibition of objects illustrative of the life and customs of the aboriginal inhabitants of the island, contributing in a large measure to its success by his personal investigations and published descriptions.

Dr. Duerden's special additions to the Museum have been in the field of Marine Zoology. He organized a biological laboratory for original research work, devoting himself especially to the study of Jamaica Actiniaria; he devoted considerable time to the identification of insect pests and the suggestion of remedies; he did much to popularize the Museum by means of "Notes" in the newspapers; he rendered valuable assistance to specialists in England and America and elsewhere in connection with the Zoology and Geology of the Island, and he made important contributions to Zoological and Biological literature, notably in the Proceedings of the Royal Dublin Society.

(iv.) *Membership*.—During the year, 29 subscribing members have joined and 40 subscribing members have been removed from the roll by death, resignation and other causes.

The Roll now stands at—

Honorary Members	...	8
Corresponding Members	...	16
Life " "	...	4
Subscribing " "	...	174
Total	...	202

or 11 less than last year.

The cause of this loss of membership may be sought, as in the previous year, in the small number of books of a popular nature that have been added to the library during the year, and in some degree to the depression of the times.

The privileges of membership of the Institute were accorded to Professor W. H. Pickering of Harvard University and to Mr. Moore, Dr. Griffin, and Mr. Coker, of the Johns Hopkins University, during their stay in the island.

(v.) *Finance*.—In Appendix A is given a statement of the Receipts and Disbursements of the Institute during the year on account of the Vote and the Private Funds.

LITERATURE.

(vi.) *Library*.—In Appendix B. is given the number of visitors to the Reading Room of the Library during the year (38,894) which, when compared with that of the previous year, shows a decrease of 2,719, due, possibly, to the reduction in the number of periodicals placed on the Reading Room table, although there are fluctuations in attendance for which it is impossible to give a satisfactory explanation. The largest attendance occurred on Friday the 18th of May, (a Packet Day) when there were 166 readers; and the smallest attendance was on Thursday, the 24th of May ("Mafeking Day") when there were 26. The next lowest attendance was on the 1st of January. The month with the highest total is March, a position it has occupied six times in ten years. The lowest is September which in the previous year was at the top of the list.

Additions to the Library.—142 volumes have been acquired during the year, 22 by donation, and 120 by purchase. The names of donors are given in Appendix C.

From Appendix D it will be seen that there are in the Library 1,607 works on the West Indies, of which 972 belong to Jamaica alone. Amongst the local books added to the library was one of considerable value:—"A Book of the continuation of Foreign passages * * * * Moreover, an attempt on the Island of Jamaica, and taking the town of St. Jago de la Vega, beating the enemy from their Forts and Ordnance, being a body of 3,000 men, and so took possession of the Island, May 10, 1655, with a full description thereof * * * *" (London 1657). One of the earliest descriptions of the Island published in England, it is a work of great rarity: only two other copies being traced, so far as is known at present.

Out of the funds—all too small—available for additions to the Library, considerable amounts have been incurred for periodicals, the repairs to books, and for the constant war that in the tropics has to be waged against insects of all sorts, involving heavy expenditure for insecticides, and in other incidental expenses.

Of the sum actually devoted to books a large proportion had to be expended on works of reference of a solid character, by the steady acquisition of which alone can it be hoped to maintain a library as a permanent institution of value. A further amount had to be expended on works of local interest. This need, so far as Jamaica books are concerned, is becoming less urgent, although during the year the Board, through lack of funds, had to forego the purchase of some valuable pamphlets, which were, however, fortunately presented to the Library. When a further sum was expended on good current literature, other than fiction, the amount available for standard fiction became very small. But in these days of very cheap colonial editions, the absence of ephemeral novels from the shelves of the library does not seem to the Board to be a matter for extreme regret. It would willingly add more works of good modern novelists, if it had the means; but it does not think it right to starve the higher branches of literature to secure that object.

Works issued.—Appendix E. gives the number of works lent out during the year (3,790), which compared with last year (3,681), shows an increase of 109 volumes borrowed, and an increase of from 19.4 volumes to 21.3 volumes per borrower—due probably to the facility of sending books to and from the country free by post.

(vii.) *Literature in the Country Districts*.—During the year two sets of one hundred volumes each were added to the Box-of-Books Scheme, making ten sets now available for circulation in country districts. There are at present seven sets in circulation, which are distributed as follows: two at Mandeville, and one each at Black River, Lucea, Falmouth, Rio Bueno, Mico Training College, Kingston.

During the year Chapelton, Manchioneal, St. Ann's Bay and Negril dropped out of the scheme. With the exception of damage by sea water, sustained by one set of books, owing to an accident to the s.s. "Specy," the books have on the whole been well cared for, and no further deterioration has been noticed than is inseparable from life in the tropics.

Although there were in May under consideration, applications from no less than seven towns for boxes which could not then be supplied, when the occasion offered later in the year only two communities availed themselves of the opportunity, and there are now three boxes (one however under promise) awaiting application.

(viii) *Mandeville Branch*.—The Local Committee of the Mandeville Branch was informed that,

owing to a decreased vote, the Board would in the future be unable to continue to supply periodicals gratuitously: but that if the Local Committee would purchase the necessary periodicals itself, and keep the Reading Room open to the public, the Board would continue to lend to it gratuitously two boxes of books of 100 volumes each; or, if the Committee preferred to discontinue the Reading Room, it could have two boxes of books at half-price (i.e. £1 5s. per set, per annum) in consideration of what Mandeville had done in connection with Library Extension work.

The Committee accepted the latter of these proposals.

(ix) *Members Room*.—In response to a somewhat frequently expressed wish, it was decided to open a Members Room in the Institute; and this—the coolest room in the Institute building—furnished with a fair supply of newspapers and magazines (given in Appendix F) was opened on April 2. During the past year the room has not been used by members so frequently as the Board, from the representations made, was led to hope would be the case; but members have freely availed themselves of the privileges of borrowing the magazines after they have come off the table.

(x.) *Publications*.—The Secretary revised the portion having reference to Jamaica of the pamphlet of information for intending settlers in the West Indies published by the Emigrants Information Office, London: and he saw through the press while on leave in England, a small volume entitled “Studies in Jamaica History” published by the Institute.

III.—SCIENCE.

(xi) *The Museum*. (a) *Additions*. Among the special additions may be noted the skeleton of a Manatee caught at Old Harbour in 1896, and articulated in England. Dr. H. L. Clark identified a collection of Jamaica Echinodermata and Mr. Miller a collection of Bats.

The closing months of the Curator's engagement were spent in working up and placing on exhibition, in a suitable manner, material which he had been collecting for some time, the re-arrangement of objects already on exhibition and the completion of a catalogue.

At the request of Professor Ray Lankester, a collection of Peripatus made by the Curator at Bath—as well as the type-specimen of Messrs. Cockerell and Graham—was sent to the British Museum for transmission to Professor Bouvier of Paris, who is preparing a work on Peripatus.

A collection of Marine Chætopods was, at the request of Professor Bell, made and sent to Dr. Willey.

(b) *Contributions*. The list of contributions is given in Appendix G. The large number shows that the usual interest in the Museum is maintained. The list of additions has been published month by month in the local papers.

(c) *Live Exhibits*. Owing to the need for retrenchment, the item for the food of the live animals was struck off the Estimates, and the animals themselves were sold by public auction—3 mammals, 35 birds, 1 reptile and a cage realizing £8 9s. 0d.

(xii.) *Museum Notes*. Museum Notes have been contributed from time to time to the local papers, dealing with subjects of importance in local natural history. The list is given in Appendix H. Other Notes upon additions, &c., have been contributed and serve to maintain an interest in the work of the Institute.

Various papers by experts have appeared in scientific publications upon material obtained in Jamaica. In response to a request from the Board of Agriculture the Board agreed that, subject to his museum duties, the Curator should, as far as possible, assist in the Entomological work of the Board of Agriculture. The Curator, with the approval of the Board, accepted a seat on the Experiment Station Committee of the Board of Agriculture: many investigations were made by him during the year in regard to insect pests destroying economic plants, and his services were placed at the disposal of Mr. Knowles, a mining expert, with a view to making geological investigations.

While on leave in the United States, the Curator devoted much time to the study and working out of examples of Jamaica Natural History, while preparing a lengthy paper on the morphology of Jamaica Madreporarian Polyps which was accepted by the Board of University Studies of the Johns Hopkins University as qualifying for the degree of Doctor of Philosophy.

The Curator got together a small collection of models and examples, illustrative of Life in Jamaica, for the Webster Free Circulating Library in New York.

IV.—ART.

(xiii.) *Art Gallery*—In Appendix I. is a list of portraits which have been added to the Jamaica Portrait Gallery. A noteworthy addition is a copy in oils of a portrait of Thomas, Lord Windsor, Governor of Jamaica in 1662, now at Hewell Grange, which was presented by Lord Windsor.

V.—LITERATURE, SCIENCE AND ART.

(xiv.) *Members Meetings*.—During the year eight members meetings were held, one paper being by a visitor to the Island, Professor Millspaugh from the United States—“The Psychology of Race” by the Hon. Sydney Olivier, C. M. G.: “Florence,” by the Rev. L. Tucker, M. A., the eighth of a series on “Celebrated Cities,”; “Three of North America's Principal Products—Corn, Timber, and Cotton,” by Professor Millspaugh of the Field Columbian Museum, Chicago; “A Recent Visit to Trinidad,” by Mr. C. E. deMercado; “The Marine Resources of the British West Indies,” by Dr. J. E. Duerden; “Bombay,” by the Rev. W. F. Martin, one of a series on “Celebrated Cities,”; “A walk through the Paris Exhibition,” by the Secretary of the Institute, and “The Mosquitoes of Jamaica,” by Dr. Graham.

(xv.) *Miscellaneous*.—The Kingston Athenæum has been added to those Institutions to which the use of the lecture hall is granted for the purpose of meetings. Members meetings of the Athenæum are held monthly in the Institute, and the Committee meetings as occasion requires.

When Mr. Aspinall, the Secretary of the West India Committee, was in the island, he visited the Institute and a suitable relationship between the Institute and the West India Committee was thus established.

Congresses—Mr. Fawcett, the Board's delegate, duly attended the 4th Congress of Chambers of Commerce of the Empire

During his absence in the United States the Curator attended, as a Delegate of the Jamaica Agricultural Society, the Commercial Congress at Philadelphia, and, with the sanction of the Board, he also attended the annual Agricultural conference held at Barbados on the 5th of January.

The Secretary has, as heretofore, carried on correspondence with persons in England and elsewhere, desiring information about the island mainly with a view to settling in it.

(xvi.) *Retrenchment*—During the latter part of the year, the Board learnt with regret that "owing to the continued failure of revenue to meet the requirements of public expenditure, and the increased charges shortly to fall upon the colonial government, the Governor was compelled to propose a reduction, for the forthcoming year, of the grant to the Institute from £1,749 12s 0d. to £1,250 0s. 0d." This very heavy reduction involved the entire recasting of the proposed expenditure, and rendered it impossible for the Board to renew the engagement of the Curator, Dr. Duerden, whose second term (of three years) of office, expired on the 23rd of February, 1901. The discontinuance of the Journal and other publications of the Institute also resulted from the reduction of the vote. A circular letter was sent to all the societies and institutions with which the Institute exchanged publications explaining why this discontinuance was necessary, and expressing its willingness to receive such publications as these societies might be pleased to send in future to its library, which, it was pointed out, maintained as hitherto, would still be supplied with such books and periodicals as might be found possible, pending such time as the Board might find itself in a position to resume the publication of its own Transactions. To these letters appreciative replies promising to continue the sending of their publications have already been received from, amongst others, the British Museum, the Society of Arts, the Imperial Institute, the Guildhall Library, the Toronto Astronomical Society, the Nova Scotia Institute of Science, the United States National Museum, the Smithsonian Institution, the University of North Carolina, the American Philosophical Society and the University of Upsala.

It was also found necessary to reduce the number of periodicals taken in, and to discontinue the maintenance of the few live native animals (coney, mongoose, crocodiles, birds, etc.) which for some years past had formed an attractive feature of the Institute, especially to visitors from abroad, and the juvenile population. The Board thus closed the year with the prospect of having in the immediate future to conduct the affairs of the Institute and endeavour to maintain public interest in its objects with crippled resources and a much diminished staff.

F. CLARKE, Chairman of the Board, 1900-01.

FRANK CUNDALL, Secretary of the Institute.

APPENDIX A.

(i) VOTE.—Receipts and Disbursements for the Year 1900-1901.

	£	s.	d.		£	s.	d.	£	s.	d.
1900—1st April.				SALARIES—						
To grant ...	1,749	12	0	By Salaries	1,136	4	0			
Excess (being 13th month salaries)	87	10	0	“ Wages	160	5	4	1,296	9	4
				SERVICES—						
				By additions to the Library—						
				“ Books £75 17 6½						
				“ Periodicals 41 3 8						
				“ Freight 10 5 0	127	8	2½			
				“ Library Expenses and Contingencies	57	1	11			
				“ Library Extension to Country Districts	54	16	0			
				“ Additions to Museum	96	7	6½			
				“ Museum Contingencies	39	2	3			
				“ Additions to Art Gallery	5	2	8			
				“ Lectures and Premiums	5	4	4			
				“ Lighting	61	12	0			
				“ Water Rate	4	0	0			
				“ Advertisements	10	0	0			
				“ Printing Reports, &c.	14	12	6			
				“ Postages	8	0	1½			
				“ Stationery	10	11	2			
				“ Institute Sundries	39	18	11½			
				“ Latrines	6	15	0	540	12	8
	£1,837	2	0					£1,837	2	0

APPENDIX A.

(ii) PRIVATE FUNDS.—Receipts and Disbursements for the Year 1900-1901.

	£	s.	d.	£	s.	d.		£	s.	d.
1900—1st April.							By “Studies in Jamaica History”	5	5	0
To Balance in Bank	69	18	8				“ Periodicals, Members Room ...	6	8	3
“ “ Petty Cash	3	17	0	73	15	8	“ Radcliffe Memorial, Refund ...	4	10	0
“ Members Subscriptions—							“ Binding Papers and rebinding Books	50	4	0
1898	0	10	0				“ Library Assistant	41	12	0
1899	0	10	0				“ Gratuities re Kingston Athenæum	2	4	0
1900	27	15	0				“ N. H. R. Union	2	0	9
1901	54	15	0	83	10	0	“ Petty Expenses	7	3	3
“ Subscriptions—Box of Books—								119	7	3
Rio Bueno	2	10	0				“ Balance Bank	£77	19	8
Black River	2	10	0				“ “ Petty Cash	6	13	4
Falmouth	2	10	0							
Lucea	2	10	0							
Mandeville	2	10	0							
Mico	2	10	0							
St. Ann’s Bay	1	5	0	16	5	0				
“ Curator’s Expenses to Bowden—										
Refund from Johns Hopkins University	6	5	0	6	5	0				
“ Kingston Athenæum	2	4	0	2	4	0				
“ Sale of Live Animals	8	9	0	8	9	0				
“ Sale of Publications	9	9	4	9	9	4				
“ N. H. R. Union Subscriptions, &c.	0	17	5	0	17	5				
“ Petty Receipts	3	4	10	3	4	10				
	£204	0	3					£204	0	3

APPENDIX B.

Record of Readers in the Library for the year ended 31st March, 1901, as compared with the five previous years.

Month.	1900-1901.			1899-1900.			1898-99.			1897-98.			1-96-97.			1895-96.		
	Day.	Evening.	Total	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.	Day.	Evening.	Total.
April	1,495	1,478	2,974	1,862	1,576	3,438	1,690	1,776	3,466	1,901	1,887	3,788	1,733	1,149	2,882	1,748	1,266	3,014
May	1,711	1,628	3,339	1,863	1,776	3,629	1,772	1,800	3,572	1,987	1,702	3,689	1,742	1,168	2,910	2,019	1,443	3,462
June	1,580	1,473	3,053	1,745	1,590	3,335	2,048	1,871	3,919	1,899	1,591	3,490	1,624	1,338	2,962	1,728	1,153	3,181
July	1,662	1,612	3,274	1,918	1,713	3,631	1,639	1,762	3,401	2,223	2,049	4,272	1,733	1,449	3,182	1,654	1,447	3,101
August	1,706	1,563	3,269	1,918	1,771	3,689	1,800	1,881	3,683	2,253	1,889	4,142	1,860	1,610	3,470	1,473	1,422	2,895
September	1,499	1,414	2,913	1,844	1,869	3,713	1,785	1,840	3,625	2,213	1,742	3,955	1,687	1,405	3,182	1,782	1,298	3,080
October	1,802	1,698	3,500	1,639	1,801	3,440	1,711	1,794	3,505	1,778	1,785	3,563	1,879	1,659	3,538	1,848	1,264	3,112
November	1,677	1,653	3,330	1,686	2,003	3,689	1,711	1,641	3,352	1,787	1,865	3,652	1,601	1,603	3,204	1,790	1,139	2,929
December	1,625	1,443	3,068	1,443	1,675	3,118	1,499	1,458	2,957	1,114	1,770	3,584	1,610	1,416	3,066	1,502	1,054	2,556
January	1,769	1,583	3,352	1,713	1,809	3,522	1,654	1,545	3,199	2,078	2,113	4,191	1,898	1,728	3,626	1,600	1,122	2,722
February	1,595	1,553	3,148	1,455	1,550	3,005	1,629	1,517	3,146	1,621	1,749	3,370	1,749	1,709	3,458	1,713	1,210	2,923
March	1,889	1,785	3,674	1,662	1,742	3,404	2,032	1,732	3,764	1,710	1,868	3,578	2,002	2,111	4,123	1,498	926	2,424
	20,011	18,803	38,814	20,738	20,875	41,613	20,920	20,419	41,339	23,264	22,010	45,274	21,138	18,435	39,573	20,351	15,044	35,399

*Closed for 5 afternoons and 3 whole days.
† " " 2 Public Holidays.
‡ " " 2 days for alterations.

Totals

1900-1901
1899-1900
1898-1899
1897-1898
1896-1897
1895-1896

38,894
41,613
41,369
45,274
39,573
35,399

COMPARISON.

1899-1900
1900-1901

41,613
38,894

2,719 or 6.53 per cent less
than last year.

APPENDIX C.

WORKS PRESENTED TO THE LIBRARY, 1900-1901.

Bound Volumes presented.

	Vols.		Vols.
United States Geological Survey	18	Messrs. Blackwood and Sons	1
J. L. Pietersz, Esq.	2	Frank Cundall, Esq.	1
		Total	22

Pamphlets etc., presented.

	Vols.		Vols.
National Museum, Buenos Ayres	6	Royal Society of Belles Lettres, Stockholm	1
Colonial Secretary, Jamaica	162	Jamaica Agricultural Society	1
South African Museum	3	Sir Fielding Clarke	1
Entomological Society, (France)	2	Hon. Wm. Fawcett, B.Sc.	2
Department of Geology, Indiana	1	Royal Society of New South Wales	1
Michigan Experiment Station	7	Hamilton Association, Hamilton	1
United States Government	10	Georgia Experiment Station	2
Societas pro Fauna et Flor Fennica, Helsingfors	1	American Museum of Natural History	1
Observatorio Central, Mexico	4	Geological Survey, N. South Wales	1
Direcion General de Estadistica, Buenos Ayres	1	Ottawa Scientific and Literary Society	1
St. George's Public Library, Grenada	1	New Zealand Institute	1
Washington Academy of Sciences	28	Zoological Society, London	1
Emigrants Information Office, London	1	Department of Land Records, Madras	5
Frank Cundall, Esq.	10	Instituto Medico Nacional, Mexico	3
Cincinnati Society of Natural History	4	Legislative Assembly, N. South Wales	1
Canadian Institute	3	Museo Nacional de Costa Rica	1
Public Museum, Milwaukee	1	Rhode Island Experiment Station	4
Edinburgh Chamber of Commerce	1	Scientific Society, Chili	4
New York Public Library	9	Robert Payne Bigelow, Esq.	1
United States Department of Agriculture	147	Pennsylvania State College, Agricultural Experiment Station	1
Cornell University	10	Imperial Department of Agriculture for the West Indies	3
Hatch Experiment Station	63	Louisiana Experiment Station	9
Society of Naturalists, Moscow	2	Massachusetts Agricultural Experiment Station	5
Professor S. H. Woodbridge	1	Massachusetts Agricultural College	3
Linnean Society, London	3	Entomological Society, Stockholm	1
Royal Swedish Academy, Stockholm	1	Department of Agriculture, Cape Colony	5
University of Pennsylvania	4	Zoologisch-botanischen Gesellschaft, Vienna	1
Department of Mines and Agriculture New South Wales	2	Wyoming Experiment Station	1
Astronomical and Physical Society, Toronto	1	New York Agricultural Experiment Station	5
Wisconsin Natural History Society	2	Maryland Agricultural Experiment Station	2
Museo Nacional, Montevideo	6	Tyneside Geographical Society	1
Johns Hopkins University	14		
J. H. Hart, Esq.	2		
Prof. J. B. Harrison, and A. J. Jukes-Browne	3		
Chamber of Commerce, N. S. Wales	2		
E. P. Felt, Esq.	1		
			589

APPENDIX D.

Classification of Volumes in the Library of the Institute of Jamaica on the 31st of March, 1901, showing the additions catalogued during the year.

	No. on 31st Mar., 1900.	No. added during year 1900-1901.	Total.
Ia. Jamaica	964	8	972
Ib. West Indies	623	12	635
Ic. West Africa	18	.	18
IIa. Theology	296	.	296
IIb. Philosophy	219	2	221
IIIa. History	1,447	11	1,458
IIIb. Biography	1,062	11	1,073
IIIc. Travels	608	9	617
IVa. Law, Politics, Sociology	410	1	411
IVb. Education	285	.	285
Va. Art	206	17	223
Vb. Science and Natural History	1,355	2	1,357
VI. Poetry and the Drama	298	.	298
VII. Linguistics and Philology	85	.	85
VIII. Prose Fiction	1,359	53	1,412
IX. Miscellaneous	608	2	610
X. Dictionaries and Works of Reference...	418	6	424
XI. Reports of Societies	516	.	516
	10,777	134	10,911

APPENDIX E.

Classified Return of the number of Works issued from the Library during the year ended 31st March, 1901, compared with the return for the five previous years.

Number of Borrowers	1900-1901.		1899-1900.		1898-99.		1897-98.		1896-97.		1895-96.	
	161		180		218		234		289		272	
	Books borrowed.	Percentage.	Books borrowed.	Percentage.	Books borrowed.	Percentage.	Books borrowed.	Percentage.	Books borrowed.	Percentage.	Books borrowed.	Percentage.
Theology, Philosophy, &c.	48	1.27	49	1.3	50	1.07	34	.65	79	1.25	78	1.27
History, Biography, Travels, &c.	405	10.69	470	12.77	432	9.25	484	9.20	560	8.83	398	6.47
Law, Politics, Sociology, &c.	26	.69	33	.90	45	.96	81	1.54	70	1.10	52	0.85
Art, Science, Natural History	144	3.80	152	4.13	161	3.45	229	4.35	310	4.89	276	4.49
Poetry and Drama	61	1.60	63	1.71	106	2.27	113	2.15	90	1.42	66	1.07
Prose Fiction	1,197	31.58	1,188	32.27	1,589	34.00	2,254	42.85	2,550	40.20	2,193	35.66
Miscellaneous	102	2.69	85	2.31	144	3.08	120	2.28	108	1.70	87	1.41
Periodicals	1,712	45.17	1,546	42.00	2,033	43.50	1,851	35.19	2,499	39.40	2,916	47.41
West India	95	2.51	95	2.58	113	2.42	94	1.79	77	1.21	84	1.37
	3,970	100.00	3,681	100.00	4,673	100.00	5,260	100.00	6,343	100.00	6,150	100.00
Comparison	...		1900-1901		...		3,750		...		3,681	
"	...		1899-1900		...		...		...		...
	Increase		...		...		109		...		...

APPENDIX F.

List of Magazines and Newspapers in the Library.

(a.) In the Members' Room.

Atlantic Monthly	Kew Bulletin
Black and White	Magazine of Art
Canadian Magazine	Nature
Cassell's Magazine	Pall Mall Magazine
Cornhill Magazine	Proceedings of the Zoological Society
Frank Leslie's Illustrated Monthly	Punch
Gentlewoman	Queen

Gleaner (Jamaica)

Harper's Weekly

Idler

Illustrated London News

Jamaica Daily Telegraph

Journal of the Microscopical Society

(b.) *In the Public Reading Room.*

Agricultural Gazette, New South Wales

Annals and Magazines of Natural History.

Army List

Art Journal

Athenæum

British Trade Journal

Budget (Jamaica)

Bulletin of the Botanical Department (Jamaica)

Bulletin of the Torrey Botanical Club

Cassell's Saturday Journal

Catholic Opinion (Jamaica)

Catholic Magazine (Jamaica)

Century Magazine

Chamber of Commerce Journal

Chambers' Journal

Choir Leader (Jamaica)

Contemporary Review

Cornwall Herald (Jamaica)

Cornwall Times (Jamaica)

Daily Mail

English Illustrated Magazine

English Mechanic

Farm Poultry

Field

Fortnightly Review

Gardner's Monthly (Jamaica)

Gleaner (Jamaica)

Good Words

Graphic

Harper's Magazine

Home Art Work

Illustrated London News

Jamaica Advocate

Jamaica Baptist Reporter

Jamaica Churchman

Jamaica Daily Telegraph

Jamaica Gazette

Sketch

Society of Arts Journal

Studio

Times (London)

Timehri (British Guiana).

Jamaica Journal of Education

Jamaica Times

Jamaica Weather Report

Johns Hopkins University Circulars

Journal of the Imperial Institute

Journal of the Royal Geographical Society

Journal of the Jamaica Agricultural Society

Leisure Hour

Library Association Record

Literary World

Magazine of Art

Methodist Messenger (Jamaica)

Musical Herald

Navy List

New York Herald

Niger & Yoruba Notes

Nineteenth Century

New Century (Jamaica)

North American Review

Odd Fellows Magazine

Portland Gazette (Jamaica)

Presbyterian (Jamaica)

Public Opinion

Publishers' Circular

Punch

Review of Reviews

Saturday Review

Science of Man

Scientific American

Scientific American Supplement, and Building Edition

Scribner's Magazine

Spectator

Strand Magazine

Tropical Agriculturist

West India Bulletin

West Indian and Commercial Advertiser.

APPENDIX G.**LIST OF DONORS TO THE MUSEUM, 1900-1901.**

Abrahams, Miss	...	Spotted chinned snake, <i>Liophis callilaemus</i> .
Abrahams, Master	...	Two headed snake, <i>Typhlops lumbricalis</i> .
Anderson, L.	...	Live caterpillar taken from grape vine.
Anderson, W. A.	...	Live caterpillar.
Attewell, H.	...	Collection of relics from the Boer War (on loan).
Baker, Rev. C. H.	...	Collection of lizards; Trap door spider and nest.
Bancroft, Miss	...	Chrysalis on grape leaf.
Barclay, John	...	Caterpillars attacking leaves of velvet bean.
Beer, Mrs. E.	...	Moth, <i>Erebus thysania</i> .
Bell, Wm.	...	Live owl.
Berry, J. W.	...	Live bat.
Bonfield, R.	...	<i>Scyllarus aequinoctialis</i> .
Breakspear, T. J.	...	Live tree frog, live turtle, collection of moths.
Brennan, J. T	...	Photograph of 100 aboriginal Indian Implements collected in the parish of St. Elizabeth.
Butler, A.	...	Live moth, <i>argens labruscae</i> .
Campbell, Colin	...	Moth.
Carpenter, Dr.	...	Moths from the United States of America.
Clark, W. G.	...	Live green lizard, <i>D Edwardsii</i> .
Collman, M. A. P.	...	Stick insect.
Conran, G. A.	...	Moth, <i>Euphyreuma pugione</i> .
Cook, C. B.	...	Butterfly, <i>Synchlote joppa</i> .
Corbett, W. G.	...	Collection of Bag-worms.
Cork, Henry	...	Grubs and wood-lice attacking roots of logwood trees.
Coward, G. F.	...	Two fossil star-fish, <i>Echinus</i> .
Cradwick, W.	...	Collection of beetles attacking orange trees, <i>Praepodes vittatus</i> .
DaSilva, E. A.	...	Live Bat, Collection of scorpions, snakes, beetles, &c,

Davis, L.	...	Larvae of the May-beetle.
DeLand, E.	...	Live beetle.
DeMercado, Harold	...	Vampire bat.
DeWever, Mrs. G.	...	Fossil coal from Highgate, St. Mary.
Drummond, W.	...	Water Scorpion, <i>Belostoma</i> .
Duerden, J. E.	...	Five <i>Peripatus</i> collected at Bath.
Dumont, A.	...	Crab.
Duncan, Miss S.	...	Eggs and larvae of Millepedes.
Fawcett, Hon. W.	...	Collection of Beetles, <i>Praepodes</i> .
Feurtado, Miss	...	Moth.
Forbes, H. L.	...	Live garden spider.
Fowler, A. H.	...	Live chicken-hawk, <i>Buteo borealis</i> .
Gooden, C. B.	...	Young skate, skeleton of young skate, baby turtle, lobster.
Gooden, T. B.	...	Spider crab.
Gooden, T. T.	...	Live moth, <i>Protoparce Jamaicensis</i> .
Griffin, Dr. L. E.	...	Collection of Marine Invertebrates from Port Royal.
Griffin, W. R.	...	Specimens of fish taken from the stomach of a shark.
Harris T. J.	...	Scorpion, <i>Centrurus margaritatus</i> .
Harris, W.	...	Nest of Solitaire from Clydesdale; Journal of Linnean Society; collection of Dipterous Cocoons; Beetle, <i>Praepodes vittatus</i> ; Transactions Linnean Society, Vol. VII, pts. 9-11; Live scorpion with young; <i>Centrurus margaritatus</i> ; Scale insects on Cherimoya; Borer attacking branch of Mountain Pride; Live scorpion, <i>C. insulanus</i>
Hart, A. J.	...	Collection of Insects.
Harty, Geo.	...	Spider. <i>Tarantula</i> .
Holwell, R. A. W.	...	<i>Cicada</i> . "Venus Lizard" <i>Dactyloa Edwardsii</i> , and mosquito hawk.
Kirkland, W.	...	Young Tropic Bird.
Lewis, W. H.	...	Live moth, <i>Argeus labruscae</i> .
McCormack, G. G.	...	Live croaking lizard.
McKenzie	...	Moth; and air-bladder of fish
Minott, H. D.	...	Live croaking lizard.
Montgomery, Fred.	...	<i>Ennys blandingii</i> .
Moxsy, Sidney	...	Snake's waiting boy; Lizard.
Mudon, W. L.	...	Caterpillar of <i>Argeus labruscae</i> .
Muirhead, Rev. C. P.	...	Stick Insect.
Neish, Dr. J.	...	Live Owl.
Nicholas, Dr. F. C.	...	Specimen of lignite taken above Moore Town on the Rio Grande.
Noyes, E. F.	...	Live Bat.
Panton, E. S.	...	Two fossil Echinodermata and two fossil bi-valves.
Plaxton, Dr. J. W.	...	Nudibranchs from Kingston Harbour; Cast of fossil shell, from Long Mountain; "Sucking Fish."
Rankine, D. A.	...	Live moth with eggs. <i>E. persolia</i> .
Robertson, C. G. F.	...	Bat.
Robinson, G. A.	...	Moth, <i>Argeus labruscae</i> .
Sanguinetti, Hon. F. S.	...	Two spiders, <i>Tarantula</i> . Two beetles, <i>Sternodontes</i> and a <i>Cicada</i> .
Scott, J.	...	Three squids
Stevens, J.	...	Water Roach, <i>Belostoma grandis</i>
Stennet, Miss W.	...	Block of limestone rock, Birds-nest; shells and broken pottery from supposed Indian shell heap.
Story, A. J.	...	Live yellow-crowned night heron.
Thomas, H. F.	...	Collection of Millepedes.
Turton, Dr.	...	Bat.
Underwood, J. B.	...	Collection of boring beetles, <i>apate</i> .
Vendryes, Mrs. A.	...	<i>Papilio thersites</i> and a live Robin.
Walker, J. A.	...	Collection of snakes from Columbia; copper or iron ore.
Whittingham, J. W.	...	Live praying mantis, <i>Mantis religiosa</i> .
Wright, Dr. L.	...	Collection of shells from Cat Island.
Young, A.	...	Live stick insect.

Donations have also been received from the following:—

Abrahams	Fraser, J. S.	Parker, E. J. H.
Aguilar, A. W. O.	Gauntlett, W. C.	Phillips, Mrs. Adelaide
Andrews	Gooden, T. B.	Pietersz, Geo. W.
Bancroft, E. W.	Grant, Alex.	Plunkett, R. C.
Barrett, Miss	Green, Virginia	Rankine, D. A.
Bell, David	Gunter, Miss	Reid, W. O.
Braham, W. B.	Hall, Ernest	Romero, J. F.
Briscoe, T.	Harris, W.	Scotland, Rev. H. H.
Campbell, D.	Harrison, E. N.	Smith, H. F.
Cargill, Miss	Harty, Miss	Solomon, H. E.
Christy, John	Heyliger, Mrs.	Sorapure, Ivan
Cox, J. H.	Hylton, H. E.	Stephens, John
DaSilva, E. A.	Hylton, Miss E. N.	Strickland, Insp.
Done, Arthur	James, Nathaniel	Sutherland, A. N.
Douët, E. M.	Joseph, George	Toone, T. W.
Dunn, C. F.	Kirkland, W.	Upton, H. E.
Edwards, W. M.	Levy, R. A.	Valverde, J. M.

Elworthy, W. B.
 Fawcett, Hon. W.
 Feurtado, Miss L.
 Feurtado, O. A. M.
 Figueroa, Frank
 Forbes, H.
 Forbes, A.
 Forrest, Eric

Little, W. A.
 McClaverty, Miss F.
 McKay, Miss
 Melville, E.
 Mornan, Rev. W. J.
 Mudon, J. R.
 Muschett, J. A.
 Muirhead, Mrs. Geo.

Vine, Stephen
 Walker, John
 Walker, W. W.
 Whitehorn, E. H.
 Whitney, Mrs.
 Whitworth, D. S. Y.
 Willis, D. H.

APPENDIX H.

Museum Notes, 1900-1901.

1. Identification of Jamaica Ticks.
2. The Attidæ, or Jumping Spiders of Jamaica.
3. The Jamaica Peripatus.
4. World's Interest in Jamaica Mongoose.
5. The History of the Mongoose.

APPENDIX J.

Additions to the Jamaica Portrait Gallery.

109. Sir Alured Clarke, Governor of Jamaica (b. ab 1745, d. 1832).
110. General Robert Venables, Commander of Army which took Jamaica (b. ab. 1612, d. 1687).
111. Vice-Admiral Sir Christopher Myngs (b. 1625, d. 1666).
112. Admiral Sir Charles Wager, Commander-in-Chief at Jamaica 1707-09 (b. 1666, d. 1743).
113. Vice-Admiral Lord Hugh Seymour, Commander-in-Chief at Jamaica, 1799-1801, (b. 1759, d. 1801).
114. James Gay Sawkins, F.G.S., Geologist (b. 1806, d. 1878).
115. Robert Jackson M.D., Inspector General of Army Hospitals (b. 1750, d. 1827).
116. Alexander Lindsay, 6th Earl of Balcarres, Lieut.-Governor of Jamaica, 1795-1801 (b. 1752, d. 1825).
117. Thomas Windsor, seventh Baron Windsor, Governor of Jamaica, 1662 (b. ab. 1627, d. 1687).
118. Vice-Admiral James Dacres, Commander-in-Chief at Jamaica, 1805-1808.
119. Sir Home Riggs Popham, Commander-in-Chief at Jamaica, 1817-1820, (b. 1762, d. 1820).

